Atlantic's [20] prefiling statement?

- [21] A: [BROWN] We're not aware of anything more [22] than what it says here or what was in public [23] statements.
- [24] **Q**: So whatever principles, as Mr. Levy was

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- [1] pursuing earlier with you, Ms. Brown—whatever [2] principles underlie Bell Atlantic's decision to [3] offer certain combinations but not all [4] combinations, as far as you know, Bell Atlantic is [5] prepared to surrender those principles in exchange [6] for a commission commitment to endorse its Section [7] 271 application. Is that an accurate [8] characterization of what we're looking at?
- [9] A: [BROWN] No, it's not.
- [10] **Q**: Let me restate the question, then. In [11] New York was Bell Atlantic New York prepared to [12] yield on whatever principles underlay its [13] resistance to providing the UNE platform in [14] exchange for a commitment by the New York [15] commission to endorse its Section 271 application?
- [16] A: [BROWN] I don't believe it's a onefor- [17] one scenario here. I think it's a comprehensive [18] set of conditions that addressed a comprehensive [19] set of issues and problems in New York, and you [20] cannot do a single "in exchange for this, we got [21] that." It's just an oversimplification of the [22] agreement.
- [23] **Q**: I understand it is a comprehensive [24] offering by Bell Atlantic, and that's what we've

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- [1] got in front of us, and it goes on for 20, 30, 40 [2] pages and appendices and whatever. What I'm trying [3] to get at is what came the other way? Is there [4] anything other than the agreement, commitment by [5] the New York commission that once Bell Atlantic [6] does all of this the New York commission will [7] endorse the 271 application?
- [8] A: [BROWN] We're not aware of anything [9] else, other than what's in this statement and in [10] public statements.
- [11] MR. JONES: Mr. Levy, I don't know [12] what your pleasure is as to a lunch break; but to [13] the extent my pleasure is relevant, I wouldn't mind [14] one.
- 15] MR. LEVY: Let's go off the record [16] briefly.
- (Discussion off the record.)
- 18] MR. LEVY: Let's go back on the [19] record.
- 20] **Q:** Ms. Stern, have you had occasion prior to [21] today to reread, or read, the transcript of your [22] testimony given on December 16th, 1997, in this [23] room?

[24] A: [STERN] Actually, I have not reread it

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- [1] for a long, long time.
- [2] **Q:** I was going to ask whether you had any [3] corrections to what you had testified to [4] previously; but if you haven't reread it in a long [5] time, I won't request that.
- [6] In your statement at the beginning of [7] this morning you made reference to the possibility [8] of a single collocation arrangement per LATA for [9] CLECs. My understanding is that referred [10] specifically to CLECs which provide their own [11] switching functionality. Is that correct?
- [12] A: [STERN] Yes.
- [13] **Q**: And the extended-link offering is an [14] offering that is useful to a CLEC that has its own [15] switch functionality for providing local service. [16] Is that an accurate statement?
- [17] A: [STERN] Yes. It would also be useful to [18] a CLEC that was just in the business of dedicated [19] private lines and didn't need to provide switch [20] services.
- [21] **Q**: For providing local-service offerings [22] using Bell Atlantic's loops and switches, the [23] extented-link offering would not be useful in the [24] provision of that service offering by a CLEC; isn't

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- [1] that correct?
- [2] A: [STERN] I'm sorry, the question again.
- [3] Q: Sure. For a CLEC that wants to offer [4] local service and it wants to do so by employing [5] Bell Atlantic's loops and switches, extended link [6] is not relevant to that CLEC for that purpose; is [7] that correct.
- [8] A: [STERN] Correct.
- [9] **Q:** And that CLEC would need to either [10] physically or virtually collocate in every central [11] office through which it attempted or wished to [12] serve retail customers; is that correct?
- [13] **A:** [STERN] For the purpose of combining a [14] link and a Bell Atlantic switch port, yes.
- [15] Q: And the extended-link offering I believe [16] you said is not an offering that permits ultimate [17] connection to a Bell Atlantic switch, but rather is [18] an extension of a link that would go to a [19] collocation space, collocation facility, owned by [20] the CLEC.
- [21] A: Yes.
- [22] Q: In the December hearing, you testified at [23] that time to various offerings that Bell Atlantic [24] was then prepared to make. And if I recall

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- [1] correctly, there was actually a Bell Atlantic [2] industry forum that was scheduled around the time [3] of the December hearing, in New York. Do you [4] recall that?
- [5] A: [STERN] Yes, there was something on [6] December 9th.
- [7] Q: I want to start with the switch [8] subplatform that's referenced in the current [9] position statement. Can you identify what [10] components of the switch-subplatform offering [11] that's identified I'm looking at Page 9 of the [12] Bell Atlantic position statement. What's included [13] in there that Bell Atlantic didn't state to [14] industry representatives in December that it would [15] offer to the industry on a combined basis?
- [16] A: [STERN] Do you mean in the December 9th [17] industry forum?
- [18] **Q**: If that was the date that was held. I [19] just know it was in December; I don't remember the [20] exact date.
- [21] A: [STERN] The main focus of that date was [22] to demonstrate to CLECs that we had workable [23] methods and procedures if a CLEC wanted to combine [24] a link and a port through its own collocation

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- [1] node. The switch subplatform, if a CLEC were using [2] that it would still need to combine that platform [3] with either our links or its own links through a [4] collocation-type arrangement.
- [5] In that industry forum we didn't talk [6] about anything, beyond the switch. In this we talk [7] about a comprehensive connection to everything [8] beyond the switch, including things like STPs, 911, [9] operator platforms, et cetera.
- [10] **Q**: And isn't it correct that as of December [11] of 1997 Bell Atlantic was prepared to offer the [12] combination of elements that's reflected under the [13] heading Switch Subplatform as an offering to the [14] CLEC industry? That was available from Bell [15] Atlantic as of that time, was it not?
- [16] A: [STERN] I don't know when this was first [17] available. I just don't know. [18] Q: Given that answer, an unfair question: [19] But not only was it available from Bell Atlantic at [20] that time, but it was available at that time [21] without any mention having been made of any glue or [22] combination charge being proposed by Bell Atlantic [23] for what we're now seeing called a switch- [24] subplatform offering.

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[1] MR. BEAUSEJOUR: I'll object. You're [2] correct, Mr. Jones: It was an unfair

question.

- [3] MR. LEVY: I'm happy to have a record [4] request on the previous question.
- [5] MR. BEAUSEJOUR: I don't mind taking [6] a record request on the previous question.
- [7] MR. JONES: I think it would be a [8] good idea if I asked a record request, on the two [9] questions, which is whether Bell Atlantic was [10] offering what is now called the switch subplatform [11] as of December of 1997; and, if not, what pieces of [12] it wasn't it offering? And isn't it the case that [13] it was making that offering without at that time [14] proposing a combination or glue charge?
- [15] MR. LEVY: Fine. That will be Record [16] Request 8.
- [17] (RECORD REQUEST.)
- [18] Q: And the switch subplatform, Ms. Stern, [19] refers to network elements that are entirely on the [20] trunk side of the switch and out into the network [21] from the trunk side of the switch. Is that a fair [22] characterization?
- [23] A: [STERN] Yes.
- [24] Q: In the Bell Atlantic/NYNEX filing with

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- [1] the FCC with respect to the thenproposed merger of [2] the two companies, the companies made a commitment [3] to the FCC to provide what they described as the [4] combination of unbundled network elements known as [5] shared transport. Are you familiar with that?
- [6] A: [STERN] Yes.
- (7) Q: Just so it's clear on the record: What |8| components of what you're now calling a switch [9] subplatform constitute what was, may still be, [10] referred to as shared transport as that term was [11] used in the commitment made to the FCC? Do you [12] understand that?
- [13] A: [STERN] Just as I wasn't there in the [14] negotiation of the New York agreement, I wasn't [15] there in the negotiations of the FCC merger [16] agreement. But my understanding of the shared [17] transport referred to in that agreement is that it [18] included basically the transport of POTS-type [19] calls, if you will, like a local call or a call —
- [20] Q: I missed the phrase there.
- [21] A: [STERN] It included transport of a [22] POTS-type, such as a local call or a call to an [23] interexchange carrier. It did not include a [24] commitment of transport to the operator and

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(i) directory platforms, and it did not include a [2] commitment of transport to the 911 hubs, did not [3] include a

- commitment of transport to databases and [4] STPs, et cetera. So this offering builds upon [5] that. It gives more than that, because it includes [6] all of those.
- [7] Q: How does Bell Atlantic, can Bell Atlantic [8] provide shared transport without signaling?
- [9] A: [ALBERT] You can use multi-frequency [10] signaling, which is out of band, and not use the [11] STPs.
- [12] Without the STPs, we can use [13] multifrequency signaling, and that signaling for [14] shared transport. That would not have the [15] signaling links or the signaling STPs.
- [16] **Q:** It would have a different form of (17) signaling.
- [18] **A:** [ALBERT] In-band MF, multi-frequency.
- [19] **Q**: You've got to have some signaling with [20] shared transport; otherwise it doesn't go [21] anywhere.
- [22] A: [ALBERT] That's right, some form of.
- [23] Q: On Page 10 of the Bell Atlantic position [24] statement, Exhibit BA Combo 2, Ms. Stern. I'm just

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- [1] curious, the description "enhanced extended-loop [2] service": How is extended-loop service enhanced in [3] this offering?
- [4] A: [STERN] I think that's just the name we [5] gave it. It has a good acronym.
- [6] Q: Well, the acronym is EELS.
- [7] (Laughter.)
- [8] A: [STERN] We chose the word "enhanced." [9] The service is what it is, as we've described it [10] here. You can call it enhanced or not, as you [11] please.
- [12] (Discussion off the record.)
- [13] MR. JONES: I think anything else I [14] have I don't need to ask Ms. Stern, so I can stop [15] with my questions of her and reserve for later.
- [16] MR. LEVY: Ms. Barbulescu, do you [17] have any questions for Ms. Stern before she has to [18] leave today?
- [19] MS. BARBULESCU: Yes, I have a few.
- [20] CROSS-EXAMINATION
- [21] BY MS. BARBULESCU:
- [22] **Q:** I just have a couple of questions. In [23] the prefiling statement that Bell Atlantic [24] submitted in New York, Bell Atlantic agreed to

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[1] provide combinations of loop and transport along [2] with multiplexing and concentration equipment; is [3] that correct? If you need a reference, it's on [4] Page 10, at the bottom, cost of services, and onto [5] 11.

- [6] A: [STERN] I don't see the line about [7] multiplexing and concentration equipment.
- [8] (Pause.) Yes, I see that.
- [9] **Q**: Does that commitment to provide [10] concentration equipment in New York include GR-303 [11] concentration?
- [12] A: [STERN] No, the commitment that we made [13] here was getting at equipment that we currently use [14] in our network. GR-303, as Mr. Albert testified to [15] earlier, we do not use in our network today.
- [16] **Q**: So in your opinion, technical feasibility [17] is equivalent to what Bell Atlantic utilizes in its [18] network. That's the definition of "technical [19] feasibility"
- [20] A: [STERN] No.
- [21] Q: No? It seems to say here that if Bell [22] Atlantic New York combines for CLECs unbundled [23] loop and transport elements, "including [24] multiplexing where required and when technically

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- [1] feasible concentration." Is that correctly what [2] that says, "technically feasible concentration [3] equipment"?
- [4] A: [STERN] Well, you read the words as they [5] appear on the page. "Concentration," I should say, [6] doesn't necessarily mean GR-303, though.
- [7] Q: In your opinion, is GR-303 technically [8] feasible?
- [9] A: [STERN] I think I'd like to refer that [10] one to Mr. Albert.
- [11] **Q**: In your opinion, is GR-303 equipment [12] technically feasible?
- [13] A: [ALBERT] I'm not really sure what you [14] mean by is it technically feasible. It's a [15] standard. It's a Bellcore generic spec that's been [16] developed. Manufacturers are beginning to design [17] to build for it. I don't know how you say if a [18] standard is technically feasible. It's a standard.
- [19] Q: Are you aware of whether or not it's used [20] in any exchange companies' facilities or networks [21] in anywhere in the country?
- [22] A: [ALBERT] I'm aware of what we do in Bell [23] Atlantic, and we're not using it.
- [24] Q: I'm asking if you are aware of whether it

- [1] is employed in any other exchange company's network [2] anywhere in the country. Do you know that?
- [3] A: [ALBERT] No, I don't know, outside of [4] Bell Atlantic, what others are doing.
- [5] Q: Do you know whether or not it's been [6] ordered in any other juris-

diction?

- [7] A: [ALBERT] No.
- (8) Q: Ms. Stern, are you aware of any [9] electronic correspondence between Jack Goldberg, of [10] Bell Atlantic, and MCI's vice-president of [11] financial operations, Dennis Kern, that might have [12] discussed the New York prefiling statement?
- [13] A: [STERN] No.
- [14] Q: I would like you to take a look at this [15] document, if you would. This would be a response [16] submitted from Jennifer Ross, and Jack Goldberg is [17] copied on it. It's a response of an e-mail that [18] Dennis Kern sent to Jack Goldberg. Let me make [19] sure I have the right pages; I only have one copy.
- [20] (Pause.)
- [21] This is an e-mail correspondence [22] between Dennis Kern, of our company, and Jack [23] Goldberg and Jennifer Ross, of your company. If [24] you would turn to the tabbed page. Could you

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- (1) please read the question and the response.
- (2) A: [STERN] Which question number?
- [3] **Q**: The highlighted one. It would be Page 9, [4] or Question 9.
- [5] A: [STERN] Question 9, "Does the commitment [6] to provide concentration equipment found on Page 10 [7] and 11 specifically include GR-303 concentration [8] equipment in combinations of loop and transport [9] UNES?" Answer: "If and when technically feasible [10] and subject to recovery of costs, GR-303-compliant [11] equipment falls within the scope of the commitment [12] regarding concentration."
- [13] **Q**: Thank you very much.
- [14] MR. BEAUSEJOUR: Could you provide a [15] copy of that?
- [16] MS. BARBULESCU: Yes.
- [17] MR. BEAUSEJOUR: If we have any [18] concerns with it, we'll address those.
- [19] A: [STERN] I think there's probably a [20] broader definition of "technically feasible" that [21] that answer encompassed, which would include [22] operationally feasible and practical.
- [23] **Q**: Thank you. Does Bell Atlantic employ [24] concentration equipment in its network?

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- [I] A: [STERN] I'll refer to Don Albert for [2] that.
- (B) A: [ALBERT] Only in the switches.
- | Q: Do you employ digital-loop carrier in |5| your network?
- [6] A: [ALBERT] Yes.

- [7] MS. BARBULESCU: I have no further [8] questions for these two. I may have some later.
- [9] MR. LEVY: Ms. Thurston, do you have [10] any questions at this time?
- [11] MS. THURSTON: No.
- [12] MR. LEVY: Mr. Kennedy has to leave [13] also.
- [14] (Recess taken for lunch.)
- [15] MR. LEVY: Let's go back on the [16] record. Welcome back, Mr. Jones.
- [17] MR. JONES: Thank you very much. [18] PAULA L. BROWN, AMY STERN, [19] and DON ALBERT, Previously Sworn [20] CROSS-EXAMINATION [21] BY MR. JONES:
- [22] Q: Mr. Kennedy, thanks for the [23] demonstration.
- [24] A: [KENNEDY] You're welcome.

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- [1] Q: In the Bell Atlantic position statement, [2] there's, as I understand it, a reference to a [3] larger version of what you've got here in the [4] hearing room; is that correct?
- [5] A: [KENNEDY] That's correct.
- [6] Q: This is a 250-connection unit?
- [7] A: [KENNEDY] That's correct.
- [8] **Q**: And the one referenced by Bell Atlantic [9] has 1,400-circuit capacity?
- [10] A: [KENNEDY] That's correct.
- [11] **Q**: And physically how big would that one [12] be?
- [13] A: [KENNEDY] That unit would be 36 inches [14] in height. This one you're viewing here is 24 [15] inches in height.
- [16] **Q**: The same width?
- [17] A: [KENNEDY] Same width, 23-inch rack- [18] mountable.
- [19] **Q**: The \$33,000 purchase price you gave was [20] for the bigger unit?
- [21] A: [KENNEDY] That's correct.
- [22] **Q**: And that's an uninstalled price?
- [23] **A:** [KENNEDY] That is equipment only, that's [24] correct.

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- [1] **Q**: Do you offer an installed package with an [2] installed price?
- [3] **A:** [KENNEDY] CON-X does offer support [4] services as far as installation goes. It is [5] typically priced, quoted on a per-job basis.
- [6] **Q:** To your knowledge, does Bell Atlantic [7] have any of these pieces of equipment installed in [8] its network anywhere?
- [9] A: [KENNEDY] For this purpose? No, not at [10] this time. But they do have an outside-plant [11] cross-box installed, yes; same device.

- [12] Q: Here in Massachusetts?
- [13] **A:** [KENNEDY] No, the Washington, D.C. area.
- [14] Q: I think Mr. Albert stated earlier that [15] Bell Atlantic has purchased two of them. Does that [16] sound right to you?
- [17] A: [KENNEDY] Well, there's actually three [18] robots in this particular application
- [19] Q: In the Washington application?
- [20] A: [KENNEDY] Yes.
- [21] **Q**: The 1400-circuit capacity, is there any [22] limitation on the types of circuits that can be [23] cross-connected using the what's the big one [24] called?

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- [1] A: [STERN] It's the M400 chassis, and it's [2] equipped with the 1400 panel, is what we're calling [3] it. It's a CLEC-specific application.
- [4] It might help to describe the matrix [5] itself for you.
- [6] Q: No, before you do that: I just want a [7] label to put on it so we can be talking about —[8] the 1400-circuit unit, what can we call it?
- [9] A: [KENNEDY] M400-1400.
- [10] **Q**: The M400 is the chassis and the 1400 is [11] the circuit capacity?
- [12] A: [KENNEDY] That's correct.
- [13] Q: What kinds of circuits?
- [14] A: [KENNEDY] The device is designed as an [15] analog cross-connect device. The panel has been [16] tested to 25 megahertz. It typically switches—[17] can handle ISDN, T1, POTS circuits.
- [18] Q: When you say an analog cross-connect [19] device —
- [20] A: [KENNEDY] As opposed to a digital.
- [21] Q: In what manner is it analog?
- [22] A: [KENNEDY] Meaning it places a physical [23] metallic connection that's designed to be in the [24] outside plant arena, hooking copper wires

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(i) together.

- [2] **Q**: And could you connect and disconnect all [3] versions of ISDN circuits through this device?
- [4] A: [KENNEDY] Yes. I mean, if it's not [5] above the 25 megahertz, sure.
- [6] **Q**: It is what I would call an [7] electromechanical device; is that an accurate [8] description?
- [9] A: [KENNEDY] That's correct.
- [10] **Q**: So it doesn't provide in fact, one of [11] the virtues that you described is the fact that it [12] provides mechanical connections and [13] disconnections.
- [14] A: [KENNEDY] That is correct.

- [15] Q: To provide service in an end office, [16] let's say a typical end office in downtown Boston, [17] if a CLEC wanted to use this equipment to have the [18] capacity to offer service to, say, 20,000 end users [19] through a particular end office, is it simply a [20] matter of arithmetic to divide 20,000 by 1400 to [21] determine how many of the devices you would need in [22] order to have that capacity?
- [23] A: [KENNEDY] That is correct.
- [24] Q: So to make it easy, if the CLEC wanted

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- [1] capacity to service 14,000 end users, it would need [2] ten of these devices.
- [3] A: [KENNEDY] That is correct.
- [4] Q: With an equipment cost of \$200,000.
- [5] A: [KENNEDY] That's correct.
- [6] Q: And an installation cost on top of that.
- [7] A: [KENNEDY] That's right.
- [8] Q: This may not be a question that ought to [9] go to you. But my understanding is that these are [10] being cited, touted by Bell Atlantic for virtual, [11] as opposed to physical, collocation capabilities; [12] and if that's the use to which they'd be put, [13] they'd be located not in a CLEC's collocation cage, [14] but somewhere in Bell Atlantic's own central-office [15] space. Is that your understanding of the intended [16] use?
- [17] A: [ALBERT] Bell Atlantic's position on [18] that would be that you could use it for physical or [19] virtual. It's not limited to virtual only. It [20] works well in that situation because of the [21] remote-control capabilities. But if the CLEC [22] wanted to use it for physical, they certainly would [23] be able to.
- [24] MR. LEVY: Excuse me, Mr. Jones.

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- [1] Mr. Kennedy, you said that capacity is 1400 [2] subscriber pairs. Is that how you would recommend [3] using that machine? In other words, would you [4] fully fill it up to all 1400, or do you leave [5] reserve, or is it actually bigger than 1400 so it [6] has some reserve?
- [7] WITNESS KENNEDY: The way that would [8] work, that particular panel design has 1400 [9] subscriber circuits entering it, it has 1400 ILEC [10] positions entering it, and it has 1400 CLEC [11] positions entering it. So what the robot ends up [12] doing is moving the pin from the ILEC-to-subscriber [13] position to the CLEC-to-subscriber position. So [14] they are unique to each other. In other words, [15] CLEC Circuit 5 is associated with Subscriber [16] Circuit 5 is associated

with ILEC Circuit 5.

- [17] MR. LEVY: So you'd use all of them.
- [18] WITNESS KENNEDY: Yes, you would use [19] all of them, that's correct.
- [20] MR. LEVY: Thank you.
- [21] **Q**: If this were used in a virtual- [22] collocation arrangement, you'd need to find [23] physical space to locate, in my hypothetical of a [24] CLEC wanting to have a capacity to serve 14,000 end

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- [1] users you'd have to find space somewhere in the [2] central office to position ten of these.
- [3] A: [KENNEDY] That's correct.
- [4] **Q**: Are these mounted on some kind of [5] freestanding frame?
- [6] **A:** [KENNEDY] Industry-standard 23-inch [7] relay-equipment rack, which is common to the [8] telephone-office equipment.
- [9] **Q:** Do they need some clearance around them [10] on the sides, above them —
- [11] A: [KENNEDY] That particular robot is 15 [12] inches front to back.
- [13] Q: Clearance requirement.
- [14] A: [KENNEDY] Right.
- [15] **Q**: For either of the Bell Atlantic [16] witnesses: Bell Atlantic's virtual-collocation [17] offering, as I understand it, requires a CLEC to [18] purchase some piece of equipment located in a [19] location in a Bell Atlantic central office and to [20] transfer title for a nominal price to Bell [21] Atlantic, so that ownership of the equipment ends [22] up being in Bell Atlantic. Is that Bell Atlantic's [23] intention with respect to this equipment in a [24] virtual-collocation arrangement?

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- [1] A: [ALBERT] That's correct.
- [2] **Q**: What is the nominal price, typically?
- [3] A: [ALBERT] A dollar, American money.
- [4] Q: When Bell Atlantic in its position [5] statement says that the virtual-collocation [6] arrangement does not require a CLEC to own any [7] network equipment, the key to that statement being [8] true is that the Bell Atlantic virtual-collocation [9] arrangement requires the transfer of title of any [10] CLEC equipment to Bell Atlantic. Is that correct?
- [11] A: [ALBERT] Right. That's the way the [12] virtual-collocation offering works. It gets [13] installed in our normal lineup of transmission [14] equipment, and we maintain it —
- [15] Q: If Bell Atlantic imposed the same

[16] requirement for physical collocation, you'd have [17] the same outcome — that is, if you required CLECs [18] to transfer title of any physical collocation [19] equipment, then you could also say that the CLEC in [20] that scenario doesn't own any network equipment.

- [21] A: [ALBERT] That's a hypothetical "if" that [22] we wouldn't do. I mean, with physical, the CLEC [23] owns it.
- [24] **Q**: In the virtual-collocation arrangement,

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- [1] the CLEC has to buy it; correct?
- [2] A: [ALBERT] Right, with virtual the CLEC [3] gets to pick the equipment, pick the technology, as [4] long as it's NEBS-compliant. Then we'll go ahead [5] and install it in the regular central-office lineup [6] and go through the process we were just talking [7] about.
- [8] Q: And once it's installed, only Bell [9] Atlantic technicians are permitted to lay hands on [10] it, as a general rule, as opposed to CLEC [11] technicians.
- [12] A: [ALBERT] That's correct, because it's in [13] Bell Atlantic's part of the central office where [14] Bell Atlantic employees are. It's right within our [15] normal lineup of transmission equipment. So if [16] there's trouble with it, the CLEC calls and says, [17] "Do this, do that, change a circuit pack." For [18] other types of transmission equipment that we [19] collocate virtually, that's the way we work and [20] operate those.
- [21] MR. LEVY: But you would let [22] Mr. Kennedy's company come in and maintain it?
- [23] WITNESS ALBERT: I don't know. I [24] hadn't thought about that. The virtual

- [1] arrangements we've got in place today, all the ones [2] we've got, Bell Atlantic takes care of them. In [3] terms of somebody else? I don't know.
- [4] Q: Who installs it?
- [5] A: [ALBERT] None of these are virtually [6] collocated yet. I can describe what we do for [7] other virtually collocated equipment. There either [8] Bell Atlantic will install it, or if it's an [9] approved vendor, then the CLEC can hire their pick [10] of approved vendors to install them.
- [11] **Q:** And that's Bell Atlantic-approved [12] vendors.
- [13] A: [ALBERT] That's correct, for working in [14] a central-office environment.
- [15] Q: And isn't it true, Mr. Albert, that Bell [16] Atlantic when it purchases central-office equipment [17] from third-party vendors, that more often than not

[18] it is the employees of the third-party vendor [19] rather than Bell Atlantic employees who actually [20] install central-office equipment?

[21] A: [ALBERT] There's a big difference. When [22] I'm describing virtual collocation that's been done [23] in other Bell Atlantic states,

[24] Q: I'm expanding my —

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- [1] A: [ALBERT] When we get to Massachusetts, [2] things are different. In New England and in [3] Massachusetts, all of the installation of telephone [4] equipment, all of the cross-connections, all of the [5] work within the central offices are done by Bell [6] Atlantic employees. So in that particular regard, [7] things are different.
- [8] **Q**: So if Bell Atlantic in Massachusetts [9] purchases a major piece of central-office equipment [10] from Lucent, Bell Atlantic, rather than Lucent, [11] employees will install that equipment?
- [12] A: [ALBERT] That's correct.
- [13] **Q**: In Bell Atlantic South, that's not [14] necessarily correct; isn't that true?
- [15] A: [ALBERT] We don't have full-time [16] employees on Bell Atlantic's payroll that typically [17] install central-office equipment. We'll use the [18] vendor, such as NorTel and Lucent and others, for [19] the installation of the equipment itself.
- [20] Q: Right. So at least in Bell Atlantic [21] South, for at least approved vendors, Bell Atlantic [22] has overcome any security concerns about having [23] non-Bell Atlantic employees working in Bell [24] Atlantic's central offices on Bell Atlantic

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- (i) equipment. Isn't that a fair statement?
- [2] A: [ALBERT] Not when you answer it in such [3] broad, sweeping terms. The hardware itself will [4] have the actual equipment manufacturers that make [5] it, like it's a switch, install it. If we're [6] talking about running connections to the frames, if [7] we're talking about running connections on [8] distributing frames, even in the South, all that [9] work is done by Bell Atlantic employees.
- [10] So you can't generalize across the [11] universe of all the activities of equipment [12] installation that happen in the central office. [13] For things like switches and major pieces of [14] transmission equipment in the South, vendors will [15] do that. But when you get into the actual work on [16] the distributing frames, the actual running of the [17] connections, the actual connections for working [18] services —
- [19] Typically, if you want a [20] generalization, if it's a working service, it's [21]

Bell Atlantic employees and Bell Atlantic hands [22] that are involved in the work on it, even in the [23] South.

[24] Q: But there are circumstances in which

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- (1) Lucent or NorTel employees are doing work on Bell (2) Atlantic central-office equipment?
- [3] A: [ALBERT] If we were to buy a new digital [4] switch that we were going to install to replace an [5] existing analog 1AESS, that would be an example of [6] a case where we would use the equipment [7] manufacturer's employees to install the equipment.
- [8] Q: And at this time, with respect to this [9] particular equipment from CON-X, you don't know [10] what Bell Atlantic's policy would be with respect [11] to who would actually do the installation work for [12] any such equipment purchased by CLECs for [13] installation in a Bell Atlantic central office?
- [14] A: [ALBERT] I'd say for Massachusetts [15] initially it would be Bell Atlantic employees. [16] Other alternatives we'd have to think about, [17] consider.
- [18] Q: What about maintenance?
- [19] A: [ALBERT] Bell Atlantic employees, under [20] the direction of the CLEC. There's a big [21] difference in that regard. We don't go up and [22] routinely change the plugs, dust the equipment [23] off. It's up to the CLEC to say, "Go to this [24] shelf, pull this card, do this specific work for

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- [1] me." So when we're talking about the maintenance [2] for virtually collocated equipment, it's really the [3] CLEC that monitors it, it's the CLEC that tests it, [4] it's the CLEC that directs the hands of our [5] employees to go up and touch it and do things.
- [6] Q: The original purpose of virtual [7] collocation, as I understand it, Mr. Albert, was [8] for providing collocation in central offices where [9] there might not be sufficient physical space to [10] permit physical collocation. Is that accurate?
- [11] A: [ALBERT] That was the main purpose for [12] it, that I'm aware of. It was an alternative to [13] physical.
- [14] **Q**: Do you know whether installing again, [15] let me choose, for simplicity's sake, ten of the [16] M400-1400 devices do you know how much physical [17] space in a Bell Atlantic central office that would [18] take? That's either Mr. Kennedy or Mr. Albert.
- (19) A: [ALBERT] I'd deferto Mr.Kennedy on the (20) number of those that you can get into a seven-foot (21) frame.

- [22] A: [KENNEDY] You can get two in a seven- [23] foot frame.
- [24] Q: Seven feet is a rertical frame at

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- [1] measurement; correct?
- [2] A: [KENNEDY] That is correct.
- [3] **Q**: So if you needed ten, you'd need five [4] frames.
- [5] A: [KENNEDY] That's correct.
- [6] A: [ALBERT] Right.
- [7] **Q:** How many of those could you get into a [8] 25-square-foot mini-collocation space?
- [9] A: [KENNEDY] I'd have to lay it out. I'd [10] saya couple of seven-foot frames. I might be off [11] by one.
- [12] **Q:** If you got a couple in there, could you [13] get a human being in there with them?
- [14] A: [ALBERT] I'd have to lay it out. I [15] think you could get a couple with a human being. [16] If you're talking about two fully-laid-out seven- [17] foot frames, each of those containing two of those [18] in a module, two in a cage.
- [19] Q: We might get Ms. Brown, but not you or [20] me, in there.
- [21] A: [BROWN] Don't count on me. I have no [22] idea.
- [23] Q: Strike the question.
- [24] **A**: [ALBERT] The application we're talking

- [1] about for these would not, I don't think, primarily [2] be for physical, although a CLEC could use it for [3] that. The application would be for virtual. In [4] that situation, we're not putting them in cages, [5] we're putting them in the normal transmission-[6] equipment portion of the Bell Atlantic central [7] office.
- [8] Q: Mr. Kennedy, you said earlier that a [9] couple of independent phone companies have [10] purchased and installed pieces of this equipment [11] and one RBOC. Is the one RBOC you're referring to [12] Bell Atlantic?
- [13] A: [KENNEDY] Yes.
- [14] **Q**: So Bell Atlantic is the only RBOC that [15] has purchased and installed any of this?
- [16] **A:** [KENNEDY] Currently, to date, yes.
- [17] MR. JONES: Could I have a minute? [18] I'm focusing on getting Mr. Kennedy out of here.
- [19] (Pause.)
- [20] MR. JONES: I don't have any further [21] questions for Mr. Kennedy.
- [22] **MR. LEVY:** Ms. Barbulescu or Ms. [23] Thurston, do you have any for Mr. Kennedy?

[24] MS. BARBULESCU:I have a couple for

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- [1] Mr. Kennedy.
- [2] CROSS-EXAMINATION
- [3] BY MS. BARBULESCU:
- [4] Q: Mr. Kennedy, I have a couple of [5] questions. You said this equipment is currently in [6] service. Is it in service for the specific purpose [7] that we want to use it here today, for remotely [8] accessing and combining unbundled network [9] elements?
- [10] A: [KENNEDY] The in-service use of it today [11] is connecting a switch port to a cable pair in a [12] remote central office that is remotely accessed. [13] So yes. But when you use the terms UNE, link to [14] port, for a CLEC's purpose, the answer to that is [15] no at this time. It's used by telephone operating [16] companies.
- [17] Q: Thank you. You said that equipment will [18] be able to combine loop and port. What about [19] remotely combining loop and transport?
- [20] A: [KENNEDY] If it falls within the [21] electrical characteristics of the circuit, it will [22] certainly combine those.
- [23] **Q**: That's all the questions I have. Thank [24] you.

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- [1] MR. LEVY: Ms. Thurston?
- [2] MS. THURSTON: No.
- [3] MR. LEVY: Mr. Beausejour, any [4] redirect for Mr. Kennedy?
- [5] MR. BEAUSEJOUR: I have none.
- [6] MR. LEVY: Let's go off the record.
- [7] (Discussion off the record.)
- [8] MR. LEVY: Back on the record. [9] PAULA L. BROWN and [10] DON ALBERT, Previously Sworn [11] MR. LEVY: Mr. Albert, I just had a [12] question. When we were talking before about the [13] company policy of having only Bell Atlantic [14] employees touch equipment in the central office, [15] does that derive in part from an agreement with the [16] Bell Atlantic unions?
- [17] WITNESS ALBERT: I don't know.
- [18] WITNESS BROWN: I don't know. I know [19] it certainly is customary in these states, but I [20] don't know —
- [21] WITNESS ALBERT: The custom and the [22] practice. I don't know if....
- [23] MS. EVANS: Can management perform [24] any of the work?

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[1] WITNESS BROWN: I would say probably [2] not, without knowing our contract per se. [3] Management typically does not perform any craft [4] work.

- [5] WITNESS ALBERT: It has to be during [6] a work stoppage.
- [7] WITNESS BROW'N: There are times, but [8] hopefully we don't encounter those
- [9] MR. LEVY: We also want to [10] distinguish between the words "can management" and [11] "may management."
- [12] WITNESS BROWN: I think "may" is the [13] operative word here. I don't think we want to use [14] the word "can."
- [15] CROSS-EXAMINATION
- [16] BY MR. JONES:
- [17] **Q**: Mr.Albert, on Page 5 of the Bell [18] Atlantic position statement, in the middle of the [19] second paragraph of that page appears the following [20] sentence. Quote, "Through this arrangement a CLEC [21] is not required to establish any physical presence [22] in a Bell Atlantic-Massachusetts central office [23] and need own no facilities of its own to access [24] UNES." You'll see this is referring to offering

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- [1] virtual collocation in every central office.Do [2] you understand the context of that statement?
- [3] A: [ALBERT] Yes.
- [4] Q: I just want to be sure we're clear on the [5] record: The CLEC may not be required to establish [6] a physical presence; but again, that's only because [7] under the Bell Atlantic approach it purchases what [8] would otherwise be a physical presence and sells it [9] to Bell Atlantic. Is that correct?
- [10] A: [ALBERT] This is virtual collocation I [11] described, where the CLEC picks the equipment, [12] selects it, sells it to us for a dollar. We then [13] maintain it under the direction of them, but we've [14] got title to the equipment.
- [15] Q: So would you agree that it might be more [16] accurate to say that a CLEC is required to purchase [17] and provide to Bell Atlantic for establishing a [18] physical presence equipment that enables the [19] provision of virtual collocation services?
- [20] A: [ALBERT] Yes, that's how we do virtual [21] collocation.
- [22] **Q:** Do you have any idea how Bell Atlantic [23] accounts for equipment that it acquires for a [24] dollar?

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- [1] A: [ALBERT] No, I have no idea how the [2] accounting works.
- [3] Q: You don't know whether that's carried on [4] its books as a rate-base item for a buck or for, in [5] this case, \$20,000?
- [6] A: [ALBERT] Well, it wouldn't be for [7] 20,000. I don't know where on the

books -

- [8] **Q:** What are the other options besides one [9] dollar or \$20,000?
- [10] A: [ALBERT] It would be one. I don't know [11] where on the books it appears. I don't know if it [12] appears as capital or if it appears as expense. [13] But it would be carried on the books at whatever [14] price we paid for it.
- [15] Q: Let's jump ahead.
- [16] MR. LEVY: May I just ask on that [17] one: If for some reason the CLEC wanted to remove [18] it and stop virtual collocation there, does it have [19] the right to get it back?
- [20] WITNESS ALBERT: We'd sell it back to [21] them for 100,000. No, we'd sell it back to them [22] for a dollar.
- [23] MR. LEVY: But they do have that [24] option.

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- [1] WITNESS ALBERT: Yes. We would [2] reverse the virtual-collocation process. We [3] haven't had anybody do that yet, but we will [4] someday, I'm sure.
- [5] Q: Mr. Albert, the switch subplatform refers [6] entirely to UNEs that are on the trunk side of the [7] switch; is that correct? And beyond, out into the [8] network.
- [9] A: [ALBERT] What page was that on, again?
- [10] Q: I'm beginning on Page 9.
- [11] A: [ALBERT] Let me read the description. [12] (Pause.) Really, I think the stuff we're combining [13] together is from the port on, because this is [14] all—
- [15] **Q**: From the trunk-port side of the switch —
- [16] A: [ALBERT] I'd say from the line port, [17] You start with the line port, and you get [18] everything from there through the trunk side and [19] then also to the peripheral systems that it all [20] connects to.
- [21] Q: So by starting from the line port, you're [22] connecting including all of the switch [23] functionality ^^sic in the switch-subplatform [24] offering.

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[1] A: [ALBERT] Yes.

- [2] MR. LEVY: That sounds wrong, [3] compared to your description here.
- [4] WITNESS ALBERT: I thought it had the [5] switch port in it. I'm not the product person.
- [6] A: [BROWN] I think this question was [7] probably best addressed to Amy. I thought you [8] had.
- [9] Q: I thought I understood it, but maybe I [10] don't.
- [11] MR. LEVY: I think the way she [12]

described it was the trunk side and the features [13] external to the switch on the trunk side.

- [14] A: [ALBERT] That's product definition.
- [15] MR. JONES: I would make a record [16] request that we learn whether the switch [17] subplatform includes all switch functionalities, [18] all functionalities of the switch UNE. If the [19] answer to that is other than yes or no [20] definitively, then could we have a description of [21] what it does and doesn't include.
- [22] MR. LEVY: Fine. That will be Record [23] Request Combinations 9.
- [24] (RECORD REQUEST.)

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- [1] Q: To the extent the switch subplatform, [2] Mr. Albert, includes elements that are out in the [3] network, let's say from the trunk port out —[4] shared transport, dedicated transport, access to [5] operator services and to emergency services and [6] signaling and the like does Bell Atlantic in [7] Massachusetts currently face any competition in the [8] market today for those service offerings?
- [9] A: [ALBERT] I don't know. Is that you [10] question: Do we face competition for those?
- [11] **Q**: Are those competitors that are offering [12] dedicated transport in Massachusetts?
- [13] A: [ALBERT] You mean like a competitive [14] access provider?
- [15] Q: I'm not limiting my question. If you [16] want to name categories, that's fine. But my [17] question is as broad as I stated it.
- [18] A: [BROWN] There is within the industry [19] competition for transport. Sitting here today, I [20] can't give you a list of who might be competing for [21] that in Massachusetts. But if you want, I'm sure [22] we can provide, to the best of our knowledge, who [23] might be competing for that.
- [24] A: [ALBERT] I mean, competitive access

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- [1] providers for access services and for transport [2] have been around for a number of years now, the [3] '90s. Do you need a list of the ones in [4] Massachusetts?
- [5] Q: No. Would it be accurate to say that [6] Bell Atlantic currently faces more competition in [7] the market for the service offerings that are [8] encompassed in the switch-subplatform offering than [9] it does for end-user loops?
- [10] A: [ALBERT] I don't know. I connect the [11] wires together and do the cut-

overs; but when you [12] get to where do we have competitors and how much [13] and who and relative to each other, you're out of [14] my league.

- [15] A: [BROWN] I would add to that: I have no [16] comparative data for the competition in the two [17] markets. I don't know of any data specifically [18] that addresses that.
- [19] **Q:** Would it be accurate to say that in this [20] position statement Bell Atlantic is voluntarily [21] offering UNE combinations on the more competitive [22] side of its network and declining to offer UNE [23] combinations on the less competitive piece of its [24] network?

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- [1] A: [BROWN] I'm not aware of any information [2] that drove the decision one way or the other.
- [3] **Q**: So we have it in one place: Mr. Albert, [4] the switch subplatform is of no use whatsoever to a [5] CLEC in combining loops and switch elements; is [6] that correct?
- [7] A: [ALBERT] I think the definition in the [8] document, it does not include the loop and the port [9] being put together. It includes what it describes [10] in here, but that does not include the loop.
- [11] **Q**: Is it accurate, Mr. Albert, that the [12] switch-subplatform offering is of no use whatsoever [13] to a CLEC in combining the loop and the switch [14] elements?
- [15] A: [ALBERT] I'm not sure if I'm really [16] following your question. I mean, what a CLEC would [17] do, they could buy the subplatform, and then they [18] would do the combining themselves, to connect the [19] loop up to it. From that point on they're off and [20] flying.
- [21] Q: Does the switch subplatform in any way [22] facilitate for a CLEC the combining of a loop [23] element and the switch element?
- [24] A: [ALBERT] I don't think it's involved

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- [1] with combining loops. I mean, the CLEC would [2] combine the loop to it; but when you're just [3] talking about it unto itself, there's no loop [4] there.
- [5] Q: Does the enhanced extended-loop service [6] in any way enhance the ability of a CLEC to combine [7] a loop and a switch element?
- [8] A: [ALBERT] Loop and switch element from [9] Bell Atlantic?
- [10] **Q**: Yes.
- [11] A: [ALBERT] No, the extended link is to [12] combine loop and transport from Bell Atlantic, [13] which would then get hooked up to CLEC-provided —[14] get

hooked up to switching provided by the CLEC.

- office of [16] Bell Atlantic, does either of you know in any of [17] the central offices in downtown Boston what the [18] current serving capacity by end-user lines is?
- [19] A: [BROWN] No.
- [20] **A:** [ALBERT] Hmm. It's going to vary from [21] one CO to the next.
- [22] Q: I don't know whether the "hmm" was a [23] negative "hmm" or a positive "hmm"?
- (24) A: [ALBERT] It was a "hmm" in that the

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- (1) capacity was going to vary by central office.
- [2] **Q:** I understand. And I'm asking for any of [3] the downtown-Boston central offices do you know [4] what that capacity is?
- [5] A: [ALBERT] No.
- [6] **Q:** Would it be safe to say it's in the [7] hundreds of thousands?
- [8] A: [ALBERT] You'll get the very biggest [9] kahunas up around 100,000. That's very big size. [10] Something more average, 50,000, 6,000.
- [11] **Q**: If a CLEC wished to compete for all of [12] the end users served by a downtown Bell Atlantic [13] central office, using virtual collocation as [14] outlined in this proposal, how many M400-1400 units [15] would it need?
- [16] A: [ALBERT] If you're, hypothetically, say, [17] taking 100,000 access lines, I guess the math would [18] be to divide that by 1,400.
- [19] **Q**: And how much space would you need to put [20] that many of those units in place?
- [21] A: [ALBERT] Well, if you get two of those [22] units and a 23-inch-wide, seven-foot-tall frame, [23] then you would need 50 frames that were 23 inches [24] wide and seven-foot tall.

- [1] **Q**: Could you fit that many frames into a [2] 100-square-foot collocation cage?
- [3] **A:** [ALBERT] If you compacted them, you [4] could. It would be a big hunk of metal.
- [5] (Laughter.)
- [6] A: [ALBERT] But under normal design, no, [7] that would not fit in a 100-square-foot cage. That [8] would be clearly ten pounds in a five-pound bag.
- [9] **Q**: The installation of these units would [10] require that they be wired from the Bell Atlantic [11] main distribution frame on a circuit-by-circuit [12] basis to the M400-1400 and then wired

back again to [13] the Bell Atlantic main distribution frame; isn't [14] that correct? You'd have to have cross-connects [15] coming from the frame to the unit and from the unit [16] back to the frame?

[17] A: [ALBERT] I wouldn't describe them as [18] cross-connects. I wouldn't say they are one at a [19] time. It's tie cables, which are 100-pair, [20] smallest minimum size. We would tie-cable from the [21] distributing frame over for the loops, and then [22] we'd also tie-cable from the distributing frame [23] over for the switchboards. So those tie cables [24] would run off of our Bell Atlantic mainframes, and

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- [1] they would be terminated onto the piece of [2] equipment.
- [3] Q: And at the point of termination, you'd [4] have to do that line by line?
- [5] A: [ALBERT] Right.
- [6] Q: The cable just is a whole bunch of lines, [7] but when you get to the place where you've got to [8] hook them up, you've got to hook them up line by [9] line; right?
- [10] A: [ALBERT] The connections would be made a [11] line at a time. The cables themselves, you're [12] running them usually in groups of 100.
- [13] Q: So the CLEC would be dependent on Bell [14] Atlantic making, if we're back to our 100,000 [15] circuits, tying in 100,000 connections to however [16] many of these units we've got and then tying them [17] back to the main distribution frame; correct?
- [18] A: [ALBERT] For the CON-X equipment, we're [19] talking about?
- [20] **Q**: Yes virtual collocation as proposed by [21] Bell Atlantic in this position statement.
- [22] A: [ALBERT] We would install the tie cables [23] to the virtually collocated equipment at the time [24] the virtually collocated equipment was installed.

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- [1] Q: What would you expect the failure rate, [2] in the sense of either improperly completed [3] connections or improperly inaccurately placed [4] connections to be where you are making 100,000 [5] connections in and 100,000 connections back to the [6] MDF?
- [7] A: [ALBERT] I'd say the end product of the [8] job would be very low. I mean, when we install [9] equipment in the central office, we test it out [10] when we're done.
- (11] **Q**: You would expect there to be some failure [12] rate, would you not?
- [13] A: [ALBERT] Some as in something more than [14] zero?

[15] Q: Yes.

[16] **A:** [ALBERT] There probably would be [17] something more than zero.

[18] **Q**: At the end of this process, let's assume [19] we're talking about an entire universe of [20] customers, existing customers, of Bell Atlantic who [21] are currently served by Bell Atlantic, and 100,000 [22] customers have decided to switch to the CLEC, and [23] you're providing it through one of these CON-X [24] units, and none of the customers has changed its,

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[1] his, or her service in any way other than to buy it [2] from the CLEC rather than from Bell Atlantic. Has [3] there been any increase of any sort in the network [4] functionality provided to those customers by virtue [5] of the connections to and from the CON-X [6] equipment?

[7] A: [ALBERT] I guess the example you're [8] talking about is so hypothetical, it's a little [9] hard for me to address. If we were to lose 100,000 [10] network access lines in a central office of ours [11] where we had 100,000 customers, we would probably [12] sell the central office, would be the way we would [13] do it.

[14] **Q**: Let's talk about one customer, this is [15] Mr. Salinger, being served through the Harrison [16] Avenue central office by Bell Atlantic. He buys [17] service from AT&T. AT&T says, "All right, we're [18] going to use the virtual-collocation option." We [19] buy a CON-X unit from CON-X, sell to it Bell [20] Atlantic for a buck. You install it. The cross- [21] connections back and forth to the main distribution [22] frame are completed, and AT&T is now serving Mr. [23] Salinger through the CON-X equipment. Has the [24] network functionality, the functionality that

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[1] provides service to him, been enhanced in any way [2] by the addition of the CON-X equipment to the [3] network configuration?

[4] A: [ALBERT] I'll probably sound a little [5] bit like the CON-X salesman at this point, but I'd [6] say yes. What the CON-X equipment does is, if you [7] accept that a typical migration path is for CLECs [8] over time to change out unbundled network elements [9] that they buy from Bell Atlantic and replace them [10] with their own facilities, if you've got a CLEC [11] customer served through a combination that runs [12] through the virtually collocated CON-X equipment, [13] and then at some point if that CLEC wants to [14] transfer the serving arrangement for that customer [15] over to an unbundled loop that would be connected [16] to the CLEC switch, that transfer is now easier, [17] simpler, faster, cheaper to do, that evolution, [18] that migration, as a result of having it go through [19] the CON-X equipment. The three-pins arrangement [20] that Mr. Kennedy was describing, where there were [21] the ILEC inputs, the loop inputs, and the CLEC [22] inputs, that's specifically built and developed to [23] allow that type of a transition and that type of a [24] cutover to occur.

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[1] Q: Let's go back to my question, though, [2] Mr. Albert, which is that Mr. Salinger is now being [3] provided the same service by AT&T that he was the [4] day before being provided by Bell Atlantic. Aside [5] from what may happen somewhere down the road in the [6] future, has the network functionality by which he [7] is provided that service improved in any way by [8] virtue of the addition of the CON-X equipment?

[9] A: [ALBERT] I'd say the functionality that [10] the end user is getting has not improved. The [11] functionality of what the CLEC is getting has [12] improved.

[13] **Q**: For the reason you previously stated.

[14] A: [ALBERT] Yes.

[15] **Q**: And if the CLEC has no plans or does not [16] convert to its own switching capability, then there [17] is no network-functionality enhancement to the [18] CLEC, either; isn't that true?

[19] A: [ALBERT] I can't think of any others.

[20] **Q:** Just to go quickly through some of the [21] other alternatives here: Minicages: These are 25 [22] square feet. In the position statement it's stated [23] that they can accommodate up to 10,000 analog [24] lines. Is that correct?

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[1] A: [ALBERT] That's correct. That would be [2] not the type of CON-X equipment that we were [3] looking at; it would be your basic blocks that are [4] used for making cross-connections in central [5] offices. There's a block called a Krone block, [6] which is pretty standard that we use, and the [7] densities of them, when you would put those [8] together, you could accommodate those quantities of [9] lines.

- [10] Q: What would a minicage accommodate for a [11] CLEC providing digital lines?
- [12] A: [ALBERT] If those digital lines are [13] on being transmitted on copper cable pairs, it [14] would be the same quantity of copper cable pairs. [15] That capacity really refers to the number of wires [16] that you would be able to install

and make [17] connections back and forth between, really [18] independent of the type of service that would be [19] riding on the wires. It could be an analog [20] service. It could be an ISDN BRI service.

[21] **Q**: I'm not going to go back through the [22] drill we went through in December in some detail. [23] But are you familiar, Mr. Albert, with the TELRIC [24] network modeled by Bell Atlantic for purposes of

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- [1] its recurring-cost-study submissions in [2] Massachusetts; that is, how that network is [3] configured, what equipment?
- [4] A: [ALBERT] No, not in Massachusetts.
- [5] Q: The subletting proposal, if I understand [6] it correctly, that is another version of physical [7] collocation. It just permits the CLEC that rents a [8] collocation cage from Bell Atlantic to sublet space [9] in its cage to another CLEC; correct?
- [10] A: [ALBERT] That's correct.
- [11] **Q**: And both CLECs would be then physically [12] collocating in that cage.
- [13] A: [ALBERT] That's correct.
- [14] **Q**: And the assembly room is virtually [15] identical to the subletting scenario, except that [16] rather than one CLEC subletting to another, Bell [17] Atlantic simply permits multiple CLECs to occupy a [18] larger collocation space?
- [19] A: [ALBERT] I wouldn't go quite as far as [20] saying virtually identical. I mean, the cabling [21] arrangements are going to be a little bit [22] different. In the assembly room the CLEC has got [23] the option of installing the cross-connect [24] equipment or having Bell Atlantic own and provide

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- [1] that cross-connect equipment that they would use. [2] So there are a couple of different options there. [3] I think those are described in our proposal.
- [4] What we would do with the assembly [5] room, though, is, we would have some standards that [6] we would develop, that basically we would have the [7] CLECs follow as far as the engineering and the [8] cabling arrangements and the setup of the equipment [9] in the room. Again this Krone block, which is what [10] we typically use in the central office for a lot of [11] our connections, it's battleship, highly reliable. [12] The cabling arrangements to that in groups of 100, [13] we would have some standardization there for the [14] setup of the assembly room.
- [15] So that basically we'd have a neat, [16] orderly, maintainable administrative arrangements [17] for everybody to use.

[18] **Q**: And everybody would be using it for [19] physical collocation. That's what the assembly [20] room provides; correct? Just in a different kind [21] of space and a different economic arrangement for [22] that space; correct?

[23] A: [ALBERT] No, I don't think so. I [24] wouldn't quite call it physical collocation. I

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- [1] mean, the CLEC can own the blocks in there that [2] they use to do the combining, or they can have Bell [3] Atlantic install them and we would own them, and [4] then they would pay for the use of those for them [5] to do the combining. So I don't know if I would [6] really equate that to collocation. But you've got [7] options where they can own it or we can own it.
- [8] Q: In terms of how the cross-connections [9] from the main distribution frame to the collocated [10] facilities, whoever owns the collocated facilities, [11] and back to the main distribution frame in that [12] respect the assembly-room arrangement would be the [13] same as what you've previously offered and [14] described as physical collocation; correct?
- [15] A: [ALBERT] Yes, the tie-cabling [16] arrangements that would take the unbundled loops [17] from Bell Atlantic's main distributing frame and [18] would take the switch ports from Bell Atlantic's [19] main distributing frame, the running of those tie [20] cables to the assembly room would be analogous to [21] the running of tie cables to a physical collocation [22] cage.
- [23] Q: Mr. Albert, is there any scenario in the [24] various alternatives that are set forth in Bell

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- [1] Atlantic's position statement which would permit a [2] CLEC to sign up an existing Bell Atlantic customer [3] and complete the ordering and provisioning of [4] service to that customer, the transfer of its [5] existing Bell Atlantic service to the CLEC, using [6] UNEs on a completely electronic flow-through basis [7] beyond the manual service-orderentry process?
- [8] A: [ALBERT] No, and even if we were doing [9] the combining ourselves in the pre-Eighth Circuit [10] mode, you wouldn't have that either. I mean, the [11] translations work; that has to be done. The [12] instructions in the switch that tell that line how [13] to function, that is not and will not be [14] automated. So the translations work to take that [15] line as a Bell Atlantic-Massachusetts end user [16] and to retranslate it and set it up as an [17] unbundled-switch port, unbundled-

switch line, [18] changing the class of service, changing the [19] line-class codes, changing the advanced intelligent [20] network triggers that we set on the line — all [21] that work will always have to be done for every [22] unbundled switch port, independent of who combines [23] it together.

[24] **Q**: Let me make my hypothetical a little

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- [1] clearer. I'm taking an existing Bell Atlantic [2] end-use customer — let's make him or her a [3] residential customer — and has residential service [4] from Bell Atlantic, with facilities in place all [5] the way to the central office serving that 161 customer. And let's assume that customer moves out [7] of the home. My understanding — and it's been [8] testified to by your predecessors for Bell Atlantic [9] on the stand here — is that Bell Atlantic in that [10] scenario simply leaves in place the physical (11) network facilities that have served that customer. [12] Is that your understanding of the general practice [13] of Bell Atlantic?
- [14] A: [ALBERT] General practice? I wouldn't [15] generalize on it. I mean, we attempt to do that.
- [16] **Q**: Let's assume in my hypothetical you've [17] done them.
- [18] **A**: [ALBERT] Okay.
- [19] **Q**: And a new customer moves into that [20] residence three days later and signs up for [21] identical service from Bell Atlantic; that is, [22] identical to what the prior customer was [23] purchasing. It has been testified to here by two [24] prior Bell Atlantic witnesses that Bell Atlantic

- [1] can provision service to that customer, other than [2] the manual process of taking the service order —[3] the operating support systems will electronically [4] on a flow-through basis complete all of the steps [5] necessary to reinstate service to that new [6] customer. That is your understanding?
- [7] A: [ALBERT] If we would be talking about [8] reinstating Bell Atlantic service —
- [9] Q: That's what we're talking about.
- [10] A: [ALBERT] Yes. If we're talking about [11] changing that from Bell Atlantic service to [12] unbundled switching, no
- [13] **Q**: We're talking about changing Bell [14] Atlantic service, the first of your options. So [15] that's done electronically on a flow-through basis [16] by Bell Atlantic using its operating support [17] systems; correct?
- [18] A: [ALBERT] Some of the times.

[19] **Q**: On one of the times when that would be [20] done electronically and on a flow-through basis for [21] Bell Atlantic, if the new customer purchased [22] service from a CLEC, identical service, and the [23] CLEC chose to provide that service through [24] unbundled network elements purchased from Bell

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- [1] Atlantic, under the various scenarios proposed in [2] Bell Atlantic's position statement, there is no [3] circumstance in which the CLEC could provision that [4] service on an electronic flow-through basis; isn't [5] that correct?
- [6] A: [ALBERT] That's correct. Bell Atlantic [7] would have translations work that we would have to [8] do to convert every one of those lines.
- [9] Q: You discussed in your opening statement [10] several alternatives that CLECs had raised in [11] various forums in various ways, and you described [12] the deficiencies with each of those, one of which [13] was logical unbundling through the recent-change [14] process; correct?
- [15] A: [ALBERT] That's correct.
- [16] Q: And logical unbundling, that phrase is [17] intended to distinguish unbundling using software [18] from physical unbundling, where things are actually [19] taken apart out in the central office or out in the [20] field. Is that an accurate statement?
- [21] A: [ALBERT] Well, I think the labeling, the [22] term that's been used for that I think is a [23] misnomer. You cannot use that capability of the [24] switch to unbundle anything. That capability does

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- [1] not disconnect the loop from the switch port. What [2] this capability does is, it activates the switching [3] service. But it doesn't have anything to do with [4] the connecting of the loop to the switch. It [5] preassumes the loop is already connected to the [6] switch. Then what it really does is, it activates [7] the switching service. But it is not connecting [8] the loop to the switch.
- [9] MR. LEVY: Could we back up on this [10] one? I don't understand what the concept is at [11] all, and it would help me to know what it actually [12] means.
- [13] MR. JONES: Could I keep going? I am [14] going to press ahead. I don't know if it will [15] help. You'll tell me if it doesn't.
- [16] WITNESS ALBERT: Would you like me to [17] take a shot at that?
- [18] Q: Let me ask you a couple of questions, Mr. [19] Albert. We're talking about a functionality, as I [20] understand it, in the switch provided by the [21] recent-change memory administration what's the

- [22] last "C" in RCMAC?
- [23] A: [ALBERT] "Center."
- [24] **Q:** Would you describe the recentchange

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- [1] functionality in Bell Atlantic's existing operating [2] support systems?
- [3] A: [ALBERT] The recent-change functionality [4] is the method for defining instructions to the [5] switch of how a switched line will operate. You [6] specify the features that will be on that line. [7] Will it have call-waiting? Will it have three-way [8] calling? Will it have speed calling? You specify 191 the type of calling privileges that it will have, [10] the calling area. You specify other dialing [11] instructions, different types of blocking for [12] instance, for 900. You specify the class of [13] service: Is it a flat rate? Is it a measured? [14] You specify the type of recording that will be done [15] for billing purposes. You specify the PIC, the [16] interexchange carrier. All the different [17] switch-related features, functions, and parameters [18] associated with that line are established through [19] recent change, which is setting up the instructions (20) and the messages to define how that switched line [21] will work.
- [22] **Q:** This is an operating support system which [23] performs those functions by software-driven [24] procedures; correct?

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- [1] A: [ALBERT] By people. You know, it's [2] people talking through a terminal to the switching [3] machine. Now, the system itself, there are further [4] degrees of mechanization that are set up that are a [5] part of that process. There are checks that are [6] made and routines that are run to the instructions [7] that the human being inputs from the terminal.
- [8] Q: The recent-change process determines [9] which switch functionalities are available on which [10] line. Is that an accurate statement?
- [11] A: [ALBERT] Yes.
- [12] **Q**: So when a switch port has a line [13] connected to it, the recent-change process dictates [14] which of the switch functions are available to, [15] accessible to that line?
- [16] A: [ALBERT] It would take the loop that's [17] connected to the switch, and it would say here are [18] the features and the functions that will be placed [19] on that dial-tone service.
- [20] **Q**: And the recent-change process permits [21] Bell Atlantic to essentially disable all switch [22] functionalities from a particular line?
- [23] A: [ALBERT] To disable and change, yes.

[24] **Q**: And you can't using recent change

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- [1] physically disconnect a line from a switch; [2] correct?
- [3] A: [ALBERT] That's what I was getting at. [4] The recent change has nothing to do with [5] disconnecting the loop from the switch or with [6] connecting the loop to the switch. It's purely [7] establishing the features and the functions of the [8] switch that are already connected to that loop.
- [9] **Q:** And if you thought of unbundling in terms [10] of not physically disconnecting a loop from a [11] switch but, rather, as disabling the switch [12] functionalities from that particular loop, in that [13] sense recent change can, if you accept my sense of [14] unbundling in that sense recent change can [15] unbundle a switch functionality from a loop. [16] Correct?
- [17] A: [ALBERT] I guess I would disagree and [18] not accept your definition of unbundling.
- [19] **Q**: I know you would not, but for purposes of [20] my question, if you accept that and I'm not [21] suggesting that you do. But if you accept that, [22] that's an accurate description, is it not?
- [23] A: [ALBERT] Again, I don't think so, [24] because I don't think you were using that to

- [1] unbundle. To me, unbundling is separating the loop [2] from the switch. If you've still got the loop [3] connected to the switch, it's not unbundled.
- [4] MR. LEVY: Just so I'm clear, this [5] RCMAC—what you're saying, Mr. Jones, and I guess [6] you would like to hear Mr. Albert say, is that that [7] functionality, that OSS can be used in essence to [8] disengage, as opposed to unbundle—disengage the [9] switch functionality from the loop functionality.
- [10] WITNESS ALBERT: No, I would say it [11] does not disengage those two functionalities from [12] each other. It will change the switch [13] functionality. It will turn off the switch [14] functionality. But it doesn't disengage it from [15] the loop.
- [16] MR. LEVY: Can it act so that there [17] is no switch functionality that is being used by [18] that loop; in other words, turn off the switch [19] relative to the loop?
- [20] A: [ALBERT] Yes, it can turn the switch [21] off, yes.
- [22] MR. LEVY: I was using the word [23] "disengage" in that way. I'm not saying physical [24] disengagement. I'm saying it can make it appear as

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- [1] though there's no switch attached to t'at loop, in [2] terms of what the loop is able to accomplish.
- [3] WITNESS ALBERT: Ask me that question [4] again?
- [5] MR. LEVY: Is it smart enough to turn [6] off whatever electronics and CPU capacity exists in [7] the switch so that the loop basically can't [8] function as a loop?
- [9] WITNESS ALBERT: I'd say the loop [10] still functions as a loop. It will shut dial tone [11] off.
- [12] MR. LEVY: Then you just have a wire [13] in the ground; right?
- [14] WITNESS ALBERT: It's still a loop.
- [15] MR. JONES: A dead loop.
- [16] MR. LEVY: It's physically attached [17] to the switch, and dial tone can be turned on [18] again. But if I'm understanding the point of Mr. [19] Jones's questions, it's that it's possible to use [20] that OSS to make the loop unfunctional carrying [21] information.
- [22] WITNESS ALBERT: I don't know if I [23] would go as far as to describe it that way. I'd [24] say you would take the dial tone off it. You

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- [1] haven't made the loop dysfunctional.
- [2] MR. LEVY: I said "unfunctional."
- [3] WITNESS ALBERT: You haven't made it [4] unfunctional. The loop is still capable of doing [5] what it does; it just doesn't have any dial tone [6] hanging on it.
- [7] MR. LEVY: We could also attach a can [8] to each end of it.
- [9] WITNESS ALBERT: That may be where [10] we're heading.
- [1.] (Laughter.)
- [12] Q: What functionality does a loop have [13] without dial tone? What can a customer do with [14] it?
- [15] A: [ALBERT] Transport. Nonswitch special [16] services is a perfect example. You can do lots of [17] things with a loop without dial tone.
- (18] Q: Dedicated transport.
- [19] **A**: [ALBERT] Yes.
- [20] **Q:** What functionality does a standard, [21] residential-service loop have when a customer has [22] moved out strike that.
- [23] When a Bell Atlantic customer moves [24] out, a residential customer, whatever usual

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[1] configuration you have serving that customer, one [2] of the things that Bell Atlantic does now is to [3] leave left-in or

- soft dial tone to that end-use [4] space; isn't that correct?
- [5] A: [ALBERT] Sometimes.
- [6] **Q**: And that is a recent-change function by [7] which that is done; is that correct?
- [8] A: [ALBERT] When you turn the dial tone [9] off, you turn the dial tone off through a recent [10] change.
- [11] **Q**: And you leave whatever capability it is [12] that permits you to provide left-in dial tone? [13] That's done through recent change as well?
- [14] A: [ALBERT] What do you mean by—what's [15] your definition of "left-in dial tone"? Because [16] there are three or four different flavors of that [17] you can run into that people use.
- [18] **Q**: Are some of those flavors achievable [19] through the recent-change process?
- [20] A: [ALBERT] Where you leave all connections [21] in place and you remove the dial tone from all [22] those, that's achievable through a recent change.
- [23] **Q**: Now, you said in your opening statement, [24] Mr. Albert, if I wrote fast enough and understood

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- [1] well enough, that, first of all, Bell Atlantic does [2] permit Centrex customers to access the recent-[3] change software-driven functionality of the network [4] for certain purposes. Is that an accurate [5] statement?
- [6] A: [ALBERT] The functionality of the [7] network? Yes. There's a system that will set out [8] in front of the RCMAC function that the Centrex [9] customers will work through to do things like [10] change speed calling, move call-waiting from one [11] line to another line, do rearrangements with [12] telephone numbers. There are a number of limited [13] activities that they can change for a specific [14] defined group of lines which they are able to [15] access.
- [16] **Q:** And the thing that sits out in front of [17] the RCMAC is the so-called firewall?
- [18] A: [ALBERT] It's more than a firewall. [19] It's the two different systems that I've described [20] that we've got in Massachusetts, one which is [21] called MAC-STAR, and the other which is the acronym [22] CCRS, which is a Bellcore product. MACSTAR was [23] originally a Lucent product and is now handled by [24] another vendor. But that sits out and ties into

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[1] the recent-change capability and is used to provide [2] these Centrex types of changes.

- [3] **Q**: And one of the purposes is to ensure that [4] a Centrex customer can access and fiddle around [5] only with that customer's own Centrex lines; [6] correct?
- [7] A: [ALBERT] Once you have defined to it the [8] universe of lines that it can fiddle with, which is [9] much different than the capability that we're [10] talking about that would have to be developed for [11] using this to have any CLEC turn on and off any [12] line that was connected to the switch. That's [13] where you get into the security and the [14] partitioning and the large amount of development. [15] It's one thing to say, " Here's a predefined group [16] of lines, and only one person can go in and monkey [17] with them." It's something else to say, "Here's a [18] multiple number of people that can go in and monkey [19] with any line throughout the whole switching [20] machine." That's the two big differences we're [21] talking about between what would exist and what [22] would have to be.
- [23] **Q**: What would it cost and how long would it [24] take to perform the development work necessary to

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- (i) create that functionality that you just described?
- [2] A: [ALBERT] I don't have any estimates on [3] it. We've had some preliminary discussions with [4] the vendors. We're talking more than a year, and [5] we're talking big bucks.
- [6] Q: Bell Atlantic has over the last two years [7] plus performed a variety of different operating- [8] support-system modifications in anticipation of [9] providing service at wholesale rather than just [10] retail levels. Isn't that an accurate statement?
- [11] A: [ALBERT] Yes, we've developed a number [12] of systems and interfaces and tied them together.
- [13] Q: And Bell Atlantic has proposed for [14] recovery in this and other jurisdictions in excess [15] of \$100 million in operating-support-system [16] development costs in order to recover the costs it [17] claims it incurred in those OSS modifications; [18] correct?
- [19] A: [ALBERT] I'm not the cost person and I'm [20] not sure what we've gone after recoverywise or [21] cost-proceeding-wise.
- [22] Q: And what would be required to achieve the [23] recent-change functionality of the sort you just [24] described, which is lots of different carriers

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(1) being able to access all of the lines, would (2) require OSS modifications;

specifically, [3] modifications to and around the RCMAC system. [4] Correct?

15] A: [ALBERT] Actually, it would be [6] modifications to a number of OSS's. You've got the [7] MACSTAR and the CCRS systems themselves. You've [8] got the RCMAC system that they've talked to. You [9] would also have systems for ordering and [10] provisioning and billing that they have to tie into [11] that would have to be developed. And then all [12] these things talk to two different switches, [13] switches that are made by Northern Telecom, [14] switches that are made by Lucent. You'd have [15] tie-ins and hooks into those that would have to be [16] worked as part of the overall development.

[17] So it's quite a number of systems [18] that would have to be modified.

[19] Q: And every one of those modifications [20] would be of the same sort, of the same type, as the [21] modifications to the OSS's that Bell Atlantic has [22] already performed and the cost of which it is now [23] attempting to recover in this 100-million—dollar-[24] plus package of costs. We're talking specific

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[1] systems and specific modifications, but it's the [2] same kind of software changes and the like that [3] would be required. Isn't that correct?

[4] A: [ALBERT] No, I'd have no basis for [5] saying that. I'm not familiar enough with the [6] depths and the complexities of what's been done for [7] the other OS systems.

[8] Q: If those changes were made and if CLECs [9] could have access to the recent-change process, [10] CLECs could perform the disabling of the switch [11] functionality on a particular loop and the [12] reenabling of switch functionality on that [13] particular loop through the recent-change process, [14] could they not?

[15] A: [ALBERT] I mean it's possible through [16] all this development work that you'd have an [17] environment where multiple CLECs could turn dial [18] tone on and off through all these developed systems [19] to an end user.

[20] Q: And in those situations where you could [21] do that, there would be no necessity or requirement [22] or need for any physical activity in the central [23] office, either through collocation cages or at the [24] main distribution frame. It could be done through

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[1] the recent-change OSS, just as Bell Atlantic does [2] now. Correct?

[3] A: [ALBERT] For the number of cases where [4] we do that now, yes, I mean, I

think what's [5] important to bear in mind is, when you're doing [6] combinations, and if you look at the ones that [7] we've actually done in the pre-Eighth Circuit mode, [8] there are quite a few where not everything is there [9] and in place and you just reuse it. We have done [10] roughly 600 pre-Eighth Circuit combinations in the [11] South. We've done roughly a thousand in the [12] North. About 50 percent of the time they were new [13] lines, new orders, rearrangements, and 50 percent [14] of the time you didn't have the facilities there to [15] reuse.

[16] The arrangements that we then talked [17] about earlier, which is, yes, we try and reuse all [18] the connections in place — in offices where we try [19] to do that, if we can reuse them 40 percent of the [20] time, we're doing good. That's because for [21] businesses there are frequently so many changes [22] that happen that we aren't able to reuse them. [23] It's for the amount of equipment on the switching [24] machine; we can't leave it there idle long enough

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[1] to be able to use it for a reuse.

[2] So with combinations you get the [3] situation where first you even only have the [4] opportunity half of the time, from what we've [5] experienced, to reuse the stuff; and then of that, [6] only 40 percent of that half of the time do we [7] actually accomplish reusing connections.

[8] So the universe is much narrower than [9] thinking, boy, every single time you're going to be [10] able to reuse all these connections that are [11] already there.

[12] **Q**: I take it, Mr. Albert, the data you've [13] just recited is set forth in Bell Atlantic internal [14] reports of one sort or another?

[15] A: [ALBERT] No, that's in my head from my [16] experience.

[17] **Q:** I'm going to make a record request for [18] any documentation that Bell Atlantic has that can [19] provide support for any of the 40 percent, 50 [20] percent figures that you just provided to us.

[21] **A:** [ALBERT] Okay.

[22] MR. LEVY: We'll call that Record [23] Request Combinations 10.

[24] (RECORD REQUEST.)

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[1] Q: With respect to those occasions when the [2] equipment is in place and it is reusable, it's with [3] respect to those service-provisioning scenarios, [4] Bell Atlantic can provision service on a complete [5] electronic flow-through basis using the RCMAC and [6] other OSS's. Isn't that correct?

[7] A: [ALBERT] That's for ourselves?

[8] Q: Yes.

[9] A: [ALBERT] Some of the time. We always [10] get fallout. That's why I said, we are not [11] successful, even if they are in place, in reusing [12] them. We get fallout in the different systems. We [13] get fallout in the RCMAC systems, in the assignment [14] systems.

[15] **Q**: Are you familiar with the fallout rates [16] that Bell Atlantic has assumed for purposes of its [17] nonrecurring-cost study and OSS-cost study it [18] submitted in Massachusetts?

[19] A: [ALBERT] No.

[20] **Q**: Are you familiar with the experiential [21] basis on which those fallout rates are determined?

[22] A: [ALBERT] No, not for the cost studies.

[23] MR. LEVY: Let's take a break.

[24] (Recess taken.)

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[1] MR. LEVY: We have a couple of [2] questions from the Bench.

[3] EXAMINATION

[4] BY MS. EVANS:

[5] **Q**: I want to go back to ask a couple of [6] questions regarding how the CON-X works. When the [7] CON-X equipment is set up in a central office, are [8] all the subscriber lines prewired to the CON-X [9] equipment, so they all appear on the CON-X [10] equipment, and therefore no physical work needs to [11] be done, outside of what the CON-X equipment does, [12] to wire or change that subscriber from a Bell [13] Atlantic subscriber to a CLEC subscriber?

[14] A: [ALBERT] No physical work by the CLEC [15] will be required at that point. There would be the [16] tie cables that run from the Bell Atlantic main [17] distributing frame for loops and for ports, would [18] run to the CON-X equipment. Bell Atlantic would [19] then make the connections from the subscriber loops [20] and the subscriber switch ports to those tie [21] cables. And then the CLEC remotely, through the [22] computer terminal, would then specify which of the [23] tie-cable inputs and outputs to connect together.

[24] So the CLEC does not have to come to

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[1] the central office to do physical work for that. [2] Bell Atlantic technicians between the distributing [3] frame and the tie cables would have to do physical [4] work.

[5] Q: Therefore do I understand correctly that [6] the only subscribers that would show up on the [7] panel that would be wired to the panel would be [8] subscribers that are changing from Bell

Atlantic to [9] a CLEC?

- [10] A: [ALBERT] That's right.
- [11] **Q**: Not all the subscribers in the central [12] office.
- [13] A: [ALBERT] That's right. What the tie [14] cables do is, that gives the ability for all of the [15] subscribers in the central office, if they need to, [16] to access that equipment. But the tie cables are a [17] much smaller subset of what would actually be used [18] to actually access it.
- [19] Q: I have one further question, regarding [20] the assembly-room setup. Do I understand correctly [21] that the assembly room allows multiple CLECs to [22] work on a frame, in essence?
- [23] A: [ALBERT] In essence, each CLEC would [24] have their own frame in that room, and they would

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- [1] be able to combine and to work on circuits for [2] their customers, all contained in the same room.
- [3] Now, I would recommend and I don't [4] think we put it in the proposal. But I would [5] recommend the equipment that you buy, or can buy, [6] that would fit can come with locking covers, and [7] I'd recommend that most CLECs would want to put the [8] locking covers on and use them for security [9] purposes.
- [10] But in essence, each CLEC all within [11] that same room is building their own frame that [12] only they work on. So you don't have five CLECs [13] all working on a common, single piece; they've all [14] got their own.
- [15] Q: And for security purposes you would [16] suggest that these frames could be locked up in [17] some way?
- [18] A: [ALBERT] Yes, there are covers that come [19] down over the front of the frames that can be [20] locked. And again, I don't think we put it in the [21] proposal, but I would recommend with the type of [22] equipment that would be deployed, that using those [23] would then allow the CLEC to lock up the front of [24] where the connections are made. I think that would

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- [1] provide a better and more secure environment for [2] their services in this room that they can all [3] access.
- [4] Q: Thank you.
- [5] EXAMINATION
- [6] BY MR. LEVY:
- [7] Q: I have a further question on the [8] assembly-room concept. Referring to Page 15 of [9] your submission, Exhibit BA Combinations 2. In the [10] footnote it says, "Costs of the assembly room will [11] be less than current physical collocation

prices [12] because environmental conditioning, battery [13] support, cable vault space, and riser space will [14] not be required." Why would environmental [15] conditioning not be required in an assembly room, [16] as opposed to a regular collocation cage?

[17] A: [ALBERT] Because the collocation cage is [18] in an overall area, where environmental [19] conditioning is providing for other CLECs that have [20] transmission equipment. In the assembly room there [21] would be no electronics, no transmission equipment [22] at all, appearing. The assembly room would be for [23] the purposes of recombining loops to switch ports [24] for the specific arrangements we specified, which I

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- [1] think were POTS. I think ISDN was in there.
- [2] Now, for those combinations you don't [3] need any battery, you don't need any power [4] equipment. All you need are these cross-connect [5] blocks and cables. So there's no electronics; [6] there's no transmission equipment. We thought this [7] would be something that would be an attractive [8] savings compared to what the conventional physical [9] collocation space surrounding a common area is.
- [10] So by putting these blocks in, they [11] don't need the environmentals. They don't need the [12] temperature. They don't need the dust. They don't [13] need the air conditioning. They don't need the [14] power leading to it. So that unto itself is [15] cheaper space to provide.
- [16] MR. LEVY: Ms. Barbulescu?
- [17] CROSS-EXAMINATION
- [18] BY MS. BARBULESCU:
- [19] **Q**: Ms. Brown, you stated before that UNE [20] combinations were less expensive than resale.[21] Could you please provide —
- [22] MS. BARBULESCU: Mr. Levy, I'd like [23] to ask a record request, that Ms. Brown provide all [24] the backup analysis that went into that conclusion

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- [1] for all the density zones in Massachusetts.
- [2] A: [BROWN] I think we're going to be [3] providing something similar to that in the record [4] request that we're going to be providing for the [5] DTE.
- [6] MR. LEVY: I missed the beginning of [7] what you were asking.
- [8] Q: I thought it was a different question [9] from the one that Mr. Levy had asked for before. [10] The information I asked for was the cost analysis [11] that led Ms. Brown to her conclusion that UNE [12] combinations were less ex-

pensive than resale in [13] Massachusetts. I'd like it for all density zones.

- [14] A: [!.ROWN] Sure.
- [15] MR. LEVY: Actually, I had asked for [16] a few examples. Yours is a larger request than [17] that, I think. So, to the extent answering Ms. [18] Barbulescu's request takes care of the other one, [19] you can just do hers.
- [20] WITNESS BROWN: We'll make sure [21] they're both answered.
- [22] MR. LEVY: That was Record Request [23] No. 11.
- [24] (RECORD REQUEST.)

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- [1] **Q**: The final question I have, and then I [2] think Mr. Mandl has some questions for you: With [3] respect to the switch-subplatform proposal, what [4] CLEC asked BA to develop that proposal, or is that [5] something that Bell Atlantic just developed on its [6] own?
- [7] A: [BROWN] I don't know.
- [8] Q: Do you know if any CLECs have requested [9] purchasing such a combination?
- [10] A: [BROWN] I don't know.
- [11] **Q**: Could I ask another record request, that [12] we find out whether any CLECs have requested this [13] from Bell Atlantic, either the development of such [14] a proposal or an actual combination.
- [15] MR. LEVY: That would be Record [16] Request 12.
- [17] (RECORD REQUEST.)
- [18] CROSS-EXAMINATION
- [19] BY MR. MANDL:
- [20] Q: Just a few questions. I'd like to ask [21] the witnesses first about the enhanced extended- [22] loop-service proposal. U ader that proposal the [23] CLEC that wants to use the UNE loops would have [24] those loops delivered to one collocation node per

- [1] LATA; is that right?
- [2] A: [ALBERT] If they chose. They could have [3] them delivered to more. But a minimum would be one [4] per LATA. If they wanted to drop them off at [5] additional locations, they certainly could.
- [6] **Q:** Has the company developed a rate for this [7] enhanced extended-loop service?
- [8] A: [BROWN] I don't believe that has been [9] developed for Massachusetts at this time.
- [10] MR. LEVY: Can I stop you for a [11] second? Can we believe that the rate is anything [12] other than the combination of the two UNE rates; [13] that is to say,

transport and link?

[14] WITNESS ALBERT: There's some [15] multiplexing in there. I'm not sure in terms of [16] rates and elements where that would get captured. [17] But that functionality has to be

[18] WITNESS BROWN: All the costs may be [19] covered in UNE rates we've already provided. I [20] just simply don't know, sitting here. We'd be glad [21] to take a look at that. But it's sort of an Amy [22] question, and she's not here. I don't know the [23] answer specifically, but I'd be glad to get you the [24] information.

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[1] MR. LEVY: I'd like to make that a [2] record request, No. 13, as to what the rate [3] elements would be for enhanced extended-loop [4] service.

(SI (RECORD REQUEST.)

- [6] Q: If a CLEC were to use enhanced [7] extended-loop service, it would be running loops [8] from a number of different locations within a LATA [9] to this single collocation node; correct?
- [10] A: [BROWN] If you chose to use it that way, [11] yes.
- [12] A: [ALBERT] And from a number of different [13] central offices, which would then be collected [14] together, and then it would be a number of loops [15] within each one of those central offices collected [16] together and then taken to the single point in the [17] LATA.
- [18] Q: For calls originating from these [19] different central offices and traveling to the [20] single collocation node in a LATA. how would those [21] calls be rated?
- [22] A: [BROWN] That would depend on how the [23] CLEC assigned telephone numbers to the loops.
- [24] Q: Well, let's go back to the basics of the

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(1) serving arrangement and start with an end user who [2] was served through this enhanced extended-loop [3] service. There will be a loop from that customer's [4] premises going somewhere. Whose loop will that [5] be? Will that be a Bell Atlantic loop?

- [6] A: [ALBERT] Yes.
- [7] A: [BROWN] Yes.
- [8] Q: And that loop will travel where?
- 19) A: [ALBERT] To Bell Atlantic's central [10] office.
- HII Q: To a Bell Atlantic central office.
- [12] A: [ALBERT] To the Bell Atlantic central [13] office that it is served by.
- [14] Q: So the call is originating, let's say, [15] hypothetically, in one wire center in the LATA, and [16] it's traveling to this single collocation node that [17] might be

in another wire center in the LATA; [18] correct?

- [19] A. [BROWN] Right. Why don't we call the [20] first Wire Center A and the second one B.
- [21] Q: And once the call reaches this [22] collocation node, then where does it go?
- [23] A: [ALBERT] Then the CLEC would put the [24] connections onto their transport facilities to

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[1] carry that loop to their switch, wherever it may be [2] located, to deliver dial tone to it.

[3] Q: The location of the CLEC switch in [4] that scenario, how will the rating of the call be [5] determined? If we have a call originating in one [6] wire center off of this enhanced extended loop, it 171 travels into another wire center in the LATA where [8] the collocation site is located, and then it's [9] transported to the CLEC's switch, which may be in [10] yet a third wire center within the LATA. How is a [11] call like that going to be

[12] A: [BROWN] Let's talk about what we mean by [13] "a call." The end user in Office A is getting [14] dial tone from, let's say, MCI's switch, which is [15] located near Office B. MCI's switch — a number is [16] going to be assigned to the end user in Office A.[17] That number will have an NNX that's associated with [18] an exchange area that's been designated. Are we [19] together at this point?

[20] Now, who's making the call? If the [21] customerout of Office A - and let's give them a [22] 555 exchange, just for some novelty here. The [23] customer in Office A has a 555 number assigned by [24] the CLEC. What are you asking me, how that

(1) customer's call is going to be rated? What are we [2] rating here?

- [3] Q: Well, a call originates with the end [4] user, who is physically located within -
- [5] A: [BROWN] He draws dial tone off of the [6] CLEC's switch with a number that's associated with [7] his end office. It's a call to where?
- [8] Q: The call is going to let's say it's [9] within the LATA, going to a wire center that's not [10] where the CLEC's switch is located, a different [11] wire center.
- [12] A: [BROWN] Let's say it's Wire Center C.[13] In your example, the telephone number that the CLEC [14] has assigned to the customer out of Office A is [15] assigned to Office A for rating purposes. That's [16] what the basic interconnections that we've done in [17] prior hearings, the recurring charges — we [18] assigned the number to a center. So it's as if [19] that call is coming from Center A

and going to [20] Center C, I think is what the question is. It's [21] terminating back to our network.

1221 MR. LEVY: I think the question is: [23] Is there anything about this extendedloop-service [24] arrangement that would change the way in which a

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[1] particular call is rated for a particular customer [2] whose call ends up going through this extended-loop [3] service? Does it change anything about the billing 141 that would occur for that call? [5] WITNESS BROWN: To the best of my [6] knowledge, the answer is no, because the billing's [7] not done off the loop end, it's done from the [8] CLEC's — it's assumed that the call is coming from [9] the CLEC's switch, it's coming into our LATA. For [10] rating purposes, it's rated, as I understand our [11] agreements, from the NNX, which for rating purposes [12] is out of Office A. So from a rating standpoint, [13] it's transparent. The driver here is where the NNX [14] is assigned to. And the loop function isn't [15] relevant. The loop function of enhanced extended [16] loop is bringing it to the CLEC's cage so it can go [17] to the CLEC's switch.

[18] WITNESS ALBERT: We're providing an [19] alternative means of transport for the CLEC to get [20] from that loop to their switch that provides dial [21] tone. So rather than the CLEC having to collocate [22] in the Bell Atlantic office and carrying it that [23] way to their switch, this is an alternative way for [24] them to take that loop and carry it to their

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[1] switch.

[2] Q: Let's use this hypothetical. There's an [3] MCI customer in Wire Center A physically located [4] within Bell Atlantic's Wire Center A, using [5] enhanced extended-loop service. It makes a call [6] which goes to the collocation node in Wire Center B [7] and then is transmitted to Wire Center C, where [8] MCI's switch is located. It happens that the [9] person that is being called is across the street [10] from Wire Center A. That call will be rated [11] differently than would a call that originated in [12] Wire Center A through a collocation arrangement in [13] Wire Center A and is transported to the receiving [14] party in Wire Center A, won't it?

- [15] A: [BROWN] I don't agree. I mean, this is [16] a CLEC call.
- [17] A: [ALBERT] That's the same-same.
- [18] A: [BROWN] I don't think I agree with your [19] example.
- [20] MR. LEVY: Is the issue here how it's

[21] rated from the point of view of the customer versus [22] how much the CLEC is paying to have that call [23] delivered and sent back?

[24] MR. MANDL: Yes.

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- [1] A: [BROWN] I don't understand.
- [2] MR. LEVY: Which are you asking?
- [3] MR. MANDL: We went through this in [4] the area-code proceeding.
- [5] A: [BROWN] How the CLEC rates the call is [6] up to the CLEC. It's a CLEC customer coming off a [7] CLEC switch. So how you choose to have your [8] calling areas is your choice. The relevant charges [9] from Bell Atlantic are the interconnection charges, [10] reciprocal compensation in the case of this call. [11] I think those rules pretty clearly establish as to [12] which charges apply, how they're applied.
- [13] **Q**: We went through this in the areacode [14] case, where the CLECs, if you will, stressed the [15] importance of having numbers assigned in individual [16] wire centers for local calls, for the reason that [17] if they were taking if they were serving a given [18] area through a switch that was on a different wire [19] center, the calls would be rated differently by [20] Bell Atlantic and the end users would end up paying [21] more for for a call that went through that type of [22] routing.
- [23] A: [BROWN] I don't know what you went [24] through in the area-code case; but in what I just

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- [1] described to you, I think your concern is dealt [2] with in that the CLEC assigns the three-digit [3] number to the end office.
- [4] Let's say we had six different end [5] offices; that the CLEC chose to take customers from [6] those end offices and bring them all into one [7] collocation cage. The CLEC certainly has the [8] option of taking six NNX codes, assigning one to [9] each end office, and assigning customers it has in [10] that end office numbers from that NNX code. The [11] CLEC tells Bell Atlantic what the NNX office is for [12] rating purposes. So whether you locate in all six [13] end offices or have those loops hauled back to one [14] collocation cage is irrelevant for rating [15] purposes.
- [16] A: [ALBERT] For rating purposes, how the [17] CLEC gets to their switch and even where that [18] switch is located doesn't make any difference. We [19] have had cases where the end-user loop is in [20] Baltimore, the first remote switch of the CLECs was [21] in northern Virginia, and the actual switch where [22]

they got their dial tone was in Texas. In those [23] arrangements the switch can be anywhere, and it [24] doesn't matter how they get there, but the calls

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- [1] are still rated the same.
 - [2] Q: In the area-code proceeding it was [3] discussed that CLECs needed NNX codes on a wire- [4] center basis in order to have calls rated as local [5] calls within that wire center.
 - [6] A: [BROWN] Yes.
 - [7] Q: Do you agree with that?
 - [8] A: [BROWN] If you have the example I [9] gave, in the Office A, the exchange wire center [10] we're talking about - we're talking about an [11] exchange here. The example I gave you is, you [12] would put an NNX in each exchange, and that would [13] be associated with that exchange, and calls to that [14] number would be local or toll, depending upon who [15] was calling it. The rating that the CLEC puts on [16] the call is up to the CLEC. But if you're asking [17] if Bell Atlantic customers calling that number [18] would have their calls rated as if they were going [19] right within the exchange, A to A or B to A, [20] whatever was the appropriate or relevant tariff is (21) charged.
 - [22] Q: In the area-code situation, if a CLEC [23] were serving the customer in Wire Center A but did [24] not have NXX codes associated with Wire Center A,

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- [1] there are some calls that would be rated as toll [2] calls rather than local calls as a result of the [3] lack of NXX's in Wire Center A. Isn't that right?
- [4] A: [BROWN] I think you're setting up a [5] different hypothetical. In that you're saying, if [6] a CI EC doesn't have enough numbers and he brought [7] calls in from assigned one code and assigned it [8] to an office, it has nothing to do with our [9] enhanced extended-loop offering. It has to do with [10] the CLEC's numbers and the CLEC's ability to assign [11] an NNX code per exchange area.
- [12] **Q**: If a CLEC has a customer in Wire Center [13] A, has its switch in Wire Center C, isn't it going [14] to have numbers associated with Wire Center C?
- [15] **A:** [BROWN] It can have numbers associated [16] with —
- [17] A: [ALBERT] The whole state, if they want.
- [18] A: [BROWN] the whole state. We may have [19] 267 exchanges, wire centers, whatever we're talking [20] about here places where you have for rating [21] purposes. A CLEC can have one switch. You can map [22] to whatever number those numbers to whatever

[23] places they want to for rating purposes. But [24] that's not the function of enhanced extended loop.

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- [1] **Q**: You're saying irrespective of where the [2] CLEC's switch is within a LATA the CLEC has the [3] ability to reserve NXX codes that relate to wire [4] centers in which the switch is not located?
- [5] A: [BROWN] Of course. I'm not aware of any [6] CLEC that is planning to have switches to be [7] coterminous with each and every one of our [8] switches. I don't know of any requirement to do [9] that.
- [10] Q: And if a CLEC were unable to obtain all [11] these NXX codes to match up with each and every [12] wire center in a LATA where it didn't have those [13] NXX codes, then the calls would be rated [14] differently.
- [15] A: [BROWN] Well, we aren't talking about [16] enhanced extended loop. What you're talking about [17] is NPA and NPA exhaust and the inability of NNX's. [18] It has nothing to do with enhanced extended loop.
- [19] **Q**: But the enhanced extended loop, if you [20] will, is not predicated upon CLECs having switches [21] in each and every existing Bell Atlantic wire [22] center.
- [23] A: [BROWN] No.
- [24] A: [ALBERT] They don't even need to have

- [1] one in the state.
- [2] MR. LEVY: Before you go on to the [3] next topic, Mr. Mandl: May I just make clear, on [4] the record request I made before about the rate [5] elements which would apply to extended-loop [6] service: As part of that, one of the things I'm [7] curious about is how you would plan on pricing the [8] transport portion of that. Do you view it as [9] dedicated, as shared? Do you require the CLEC in [10] essence to buy the full capacity of the transport [11] trunk for a given number of links coming in? Do [12] you understand the kinds of questions I'm asking?
- [13] WITNESS BROWN: Yes.
- [14] MR. LEVY: Is there a ratio of links [15] coming in to capacity of transport going out that [16] you would apply?
- [17] WITNESS BROWN: It's one-per-one.
- [18] MR. LEVY: One link, one transport?
- [19] WITNESS BROWN: In other words, if [20] you could get a DS1, it had the capacity for 24 [21] links to put on; if you get a DS3, it's a [22] multiplying factor that's up to 600 or something.
- [23] MR. LEVY: The question I'm asking, [24] let's say there are 24 links coming in

and a DS1

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- [1] could handle all of those coming out. Are you [2] designing and pricing it as though all of those [3] links are using the DS1 at the same time?
- [4] WITNESS BROWN: It's MUXed to the [5] degree it's brought up so that it can be put on the [6] piece of equipment. But you have 24 talk paths. [7] There's no ratio there's no switching or —
- [8] WITNESS ALBERT: No switching or [9] concentration.
- [10] WITNESS BROWN:— or concentration.
- [11] WITNESS ALBERT: They're
- multiplexed [12] together digitally, but it's still bandwidth for [13] one output to match up to the bandwidth for one [14] input. The CLEC can determine how much output they [15] buy, but they've at least got to have enough output [16] to handle the incoming input. They can buy more [17] output than you need, but they don't have to. But [18] you've got to at least have enough output to handle [19] the incoming input.
- [20] MR. LEVY: Or else you get some [21] blockage.
- [22] WITNESS ALBERT: Or it doesn't work. [23] There's no blockage that occurs. It's the [24] equivalent of each end user having their full pair

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- (i) of wires loop all the way from their telephone set [2] to the CLEC's switch. It's the functional [3] equivalent of what we're providing.
- [4] MR. LEVY: So it is like an FX or a [5] private line.
- 161 WITNESS ALBERT: Yes.
- [7] WITNESS BROWN: Yes.
- [8] WITNESS ALBERT: It's the same way we [9] lump our end users together to move them on [10] interoffice transport.
- [11] MR. LEVY: And is that what you [12] actually do with FX and private line now?
- [13] WITNESS ALBERT: Yes.
- [14] MR. LEVY: Why was I under the [15] impression that there's more of a virtual private [16] line or a virtual FX, where there actually is [17] switching involved, so that you can achieve some [18] efficiencies down the network on the transport part [19] of the connection? Is that wrong?
- [20] WITNESS ALBERT: Do you know what we [21] do?
- [22] WITNESS BROWN: I can't respond to
- [24] WITNESS ALBERT: There are ways

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- [1] technically to do that. I'm not aware if we do or [2] if we don't in Massachusetts.
- [3] MR. LEVY: I'm going back ten years, [4] where I thought the movement was from actual [5] private line to virtual private line, where the [6] idea was that you would not actually dedicate [7] particular facilities.
- [8] WITNESS ALBERT: There are types of [9] data-switching technology where that is the case. [10] But for voice traffic and for foreign-exchanging [11] types of arrangements, it's full-period input to [12] output. When you get to data type of traffic, [13] there are other types of multiplexing, other types [14] of concentration and switching technology, that [15] allow you to do crunching of bandwidth; but not for [16] the voice-type calls
- [17] MR. LEVY: Thank you.
- [18] **Q**: Mr. Albert, I think you testified earlier [19] about trouble-report rate comparisons between [20] unbundled-loop provisioning and retail services. [21] Do you recall that?
- [22] A: [ALBERT] That's correct.
- [23] **Q**: I guess by definition there must be [24] documentation that would indicate what those

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- [1] comparisons show?
- [2] A: [ALBERT] Yes. I've got stuff for [3] January, February, and March.
- [4] Q: For Massachusetts?
- [5] A: [ALBERT] Yes.
- [6] MR. MANDL: I'd like to make a record [7] request, to just take a look at those trouble [8] reports, the comparisons.
- [9] A: [ALBERT] I've got the rate. It's [10] expressed as a rate per 100.
- [11] MR. LEVY: That's No. 14.
- [12] (RECORD REQUEST.)
- [13] **Q**: In one of these serving arrangements [14] proposed by Bell Atlantic I think it was virtual [15] collocation there was some discussion about the [16] need for tie cables. Do the tie cables relate [17] solely to the virtual-collocation proposal?
- [18] A: [ALBERT] No. The tie cables also would [19] be used for physical collocation. Tie cable is the [20] cabling arrangement within our central offices to [21] get from our main distributing frame to either a [22] physical collocation cage or to get to an assembly [23] room or to get to a piece of virtually collocated [24] equipment.

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[1] **Q:** Taking the virtual-collocation [2] arrangement: Would there be a charge

- for the [3] provisioning of these tie cables?
- [4] A: [ALBERT] I'm not sure of the rate [5] structure. I mean, we don't do it for free, but [6] I'm not sure of the rate structure of how that gets [7] recovered. I think there's a rate element called a [8] cross-connect or an SAC. But I'm not sure if that [9] matches exactly one for one with just strictly the [10] tie cable or if there are other components involved [11] or not. But we don't do it for nothing.
- [12] **Q**: At this time has the company developed [13] any rate proposals or rate levels for virtual [14] collocation in Massachusetts?
- [15] **A**: [BROWN] Yes.
- [16] MR. LEVY: You have?
- [17] WITNESS BROWN: We are in the process [18] of developing them.
- [19] A: [BROWN] Did I misunderstand your [20] question? I'm sorry.
- [21] **Q**: I had asked had the company, and Iguess [22] you've indicated you are in the process.
- [23] A: [BROWN] We're in the process.
- [24] **Q**: They haven't been produced, though, as

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- (1) part of the company's comments?
- [2] A: [BROWN] No, but we hope that we will be [3] filing them very shortly.
- [4] Q: In the company's discussions with CON-X, [5] has it obtained any order of magnitude for [6] installation of the CON-X equipment?
- [7] A: [ALBERT] Not that I'm familiar with.
- [8] Q: Has the company performed any analysis of [9] the life-cycle costs of the CON-X equipment?
- [10] A: [ALBERT] Life-cycle costs? I don't [11] know.
- [12] **Q**: Do you know what the annual costs would [13] be for operating and maintaining that equipment?
- [14] A: [ALBERT] No, I don't.
- [15] **Q**: Do you know if the CON-X equipment is [16] undergoing any further industry standards testing [17] before any greater deployment?
- [18] A: [ALBERT] For the purposes of us [19] deploying them in Bell Atlantic's network, they [20] have passed all the tests that we would require. [21] So some of the tests Mr. Kennedy talked about, the [22] NEBS tests, which are a series of different tests [23] for either deploying equipment in the central [24] office, and then another series of tests for

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[1] deploying the equipment in the

outside plant —[2] they have passed all those. Those are Bellcore [3] tests.

[4] They do a variety of funky things, [5] like set it on fire and see what it does and blow [6] salt at it and try and explode it. There are a [7] whole number of items like that — simulate [8] earthquakes. It's passed all those, to the point [9] where it's okay to put in the CO and okay to use in [10] the network in the outside plant.

[11] **Q**: Does Bell Atlantic make any use of this [12] CON-X equipment other than virtual collocation?

[13] A: [ALBERT] Yes. The ones I'm worked [14] with - that's why I'm familiar with the [15] equipment. The ones that we've established in [16] Maryland that Mr. Kennedy wastalking about, we've [17] used those in an outside-plant application. We've [18] also had ones that we've stress-tested in northern [19] Virginia. We are in final price negotiations with [20] CON-X for ones that we will buy and use for [21] purposes of our own network. That's not virtual [22] collocation, because we don't virtually collocate [23] ourselves. But we do deploy equipment for our own [24] use and own purposes, and we are going to be buying

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- [1] some of CON-X's equipment.
- [2] **Q**: Will it be a different model for your [3] outside-plant purposes than for virtual-collocation [4] purposes?
- [5] A: [ALBERT] Yes, the two are slightly [6] different, the packaging and the tests that they [7] have passed. The basic unit itself, though, is the [8] same thing. The packaging is different, but the [9] unit's the same.
- [10] **Q**: If we can turn to Page 15 of the [11] company's comments. This is in regard to the [12] assembly room.
- [13] I am going to withdr (w what I was [14] going to ask.
- [15] MR. MANDL: That's it. Thank you.
- [16] MR. LEVY: Ms. Thurston, any [17] questions?
- [18] MS. THURSTON: No.
- [19] MR. LEVY: Any redirect?
- [20] MR. BEAUSEJOUR: No. Mr. Levy.
- [21] MR. LEVY: Thank you very much for [22] coming.
- [23] JAMES O. CARLSON, Previously Sworn [24] MS. THURSTON: I don't know what the

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[1] process should be. We didn't present any prefiled [2] testimony. We don't have a formal presentation. [3] Mr. Carlson is here primarily to answer any [4] questions that you may have of him or any of the [5] other parties. He does have a brief opening [6] statement he can give on our general policy.

[7] MR. LEVY: That would be great. And [8] if you could just give us your full name and your [9] current job, I'd appreciate that

that. My name is James O. Carlson. I work for [12] Sprint Communications Company LLP. My address is [13] 8140 Ward Parkway, Kansas City, Missouri 64114.

[14] My title at Sprint is manager, [15] regulatory policy and coordination. Specifically [16] in that role I get involved with regulatory issues [17] that deal with Sprint's entry into the local- [18] telephone market. So that's kind of the niche that [19] I've gotten into.

[20] I'm going to share just a few [21] thoughts this afternoon, with the intent on keeping [22] it brief so I can get my son a Celtics hat at the [23] airport before I catch my plane.

[24] Let me make a few short statements

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[1] that relate to Sprint's concerns about the issues [2] before us. Let me begin by stating the obvious: [3] For telecommunications services to be provided, [4] network elements have to be combined. Given this, [5] if CLECs like Sprint want to use Bell Atlantic's [6] unbundled network elements, as we do, they have to [7] be combined. You just can't get around that.

[8] So the question here today is, who [9] does the combination? Now, Bell Atlantic and [10] Sprint disagree over whether the Department has [11] authority to order Bell Atlantic to combine network [12] elements for CLECs. I'm not a lawyer, so I'm not [13] going to make any legal arguments here. And since [14] Sprint's position is clearly outlined in its [15] petition filed with the Department on April 16th, [16] I'll only say that it's Sprint's position that the [17] Department does have the authority to adopt [18] Sprint's proconsumer proposal.

[19] So what I do want to talk about today [20] is what action the Department should take on the [21] topic of who does the combination. I think it [22] makes sense to first begin the discussion by [23] talking about the criteria that should be used in [24] answering the important question of who does the

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[1] combination or who needs to do the combination. As [2] I said, I live in Kansas City, Missouri. Currently [3] on the radio and television there's a public- [3] awareness campaign going on that's directed at [5] decisionmakers in the city. What the ads basically [6] say is that when decisions are made a question [7] should be asked. The point that's being made in [8]

that ad campaign is that the question ought to be [9] asked, how would it affect the children?

[10] Borrowing from that theme, I'd like [11] to suggest a similar question ought to be asked by [12] the Department within this context: How would it [13] affect consumers in Massachusetts? Obviously, Bell [14] Atlantic and the CLECs are advancing dissimilar [15] positions. In my mind, obviously the challenge is [16] for the Department to weigh each party's argument [17] and make a determination based on how it affects [18] consumers in Massachusetts.

Proceeding is that it's in the customers' interests [21] that Bell Atlantic be required to combine UNEs for [22] CLECs in the same manner as they combine network [23] elements for their own customers today, and that [24] CLECs should fully compensate Bell Atlantic for

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[1] that combination work at appropriately developed [2] cost-based rates. Under Sprint's proposal, [3] Massachusetts consumers' phone service would not be [4] disconnected, would not be put at risk due to new [5] multiple points of failure in the network, and the [6] costs of implementing local competition would be [7] kept at a minimum—costs which consumers could [8] eventually bear.

[9] So back to the original question: [10] How would Sprint's proposal affect consumers in [11] Massachusetts? The answer, at least in my opinion, [12] is that it protects phone service, it protects the [13] development of local-exchange competition, and it [14] minimizes consumer costs.

[15] Now let's look at Bell Atlantic's [16] proposal and ask the same questions: How would it [17] affect consumers in Massachusetts? First, under [18] Bell Atlantic's proposal, if a CLEC wants to buy an [19] unbundled loop and unbundled switching, unnecessary [20] telecommunications equipment would be inserted into [21] their network, requiring phone service to be [22] disconnected for a period of time, and putting [23] phone service at risk due to new multiple points of [24] failure in Bell Atlantic's network. This is not

- [1] good for consumers.
- [2] Second, Bell Atlantic's proposal [3] creates the need for numerous manual steps to be [4] taken by Bell Atlantic and the CLECs to provision [5] service, steps which, if there is any [6] miscommunication, could lead to delay in the time [7] it takes for CLECs to provision services. This [8] delay will only frustrate

the CLEC's customers, [9] which could then cause them to go back to Bell [10] Atlantic, Bell Atlantic would not face this [11] potential obstacle, and therefore their proposal [12] creates a barrier to entry that will only frustrate [13] the development of local-exchange competition. [14] This is not good for consumers in Massachusetts.

[15] Finally, Bell Atlantic's proposal [16] creates a whole host of new costs which add no [17] value at all. New equipment must be added to the [18] network. Noncost-based glue charges. New manual [19] processes would have to be created. Assembly rooms [20] would have to be constructed. All these items [21] create costs which serve no benefit and add no [22] value to consumers in Massachusetts. Both Bell [23] Atlantic and the CLECs would incur these costs, and [24] those costs could potentially be passed on to

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(i) consumers in Massachusetts.

[2] In conclusion, I would like to [3] reiterate that Sprint recommends that the [4] Department require Bell Atlantic to combine network [5] elements for CLECs in the same manner as it does [6] for its own customers today. Sprint's proposal is [7] procompetition, pro-Massachusetts consumer, and [8] should be adopted. Thank you.

191 EXAMINATION

[10] BY MR. LEVY:

[11] Q: Would you like to address the arbitrage [12] issue that Bell Atlantic has discussed, the idea [13] that if a CLEC has the option of, in essence, [14] purchasing the same service either on a resale [15] basis or a UNE-combination basis, it will obviously [16] pick the lower-priced way of doing that and that [17] that conflicts with the overall framework set forth [18] in the Act?

[19] A: I'd be glad to. You made an important [20] point in your question, and that is CLECs buying [21] the same service. When I think of arbitrage, [22] normally the way I think of it is in the access [23] world, where Sprint terminates long-distance [24] traffic to Bell Atlantic today, let's say in

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[1] Boston, and that traffic can come from another part [2] of the state or it can come from another part of [3] the country. But as it comes to Bell Atlantic, [4] it's a minute is a minute is a minute. But Bell [5] Atlantic's tariff could look different, most likely [6] does, whether it's intrastate minutes or interstate [7] minutes.

[8] INC's, since Sprint has to report to [9] Bell Atlantic the percentage of interstate usage [10] that it has, and since that

percentage drives [11] whether minutes are billed from their interstate [12] tariff or intrastate tariff, an arbitrage [13] opportunity exists there, where an IXC — Sprint [14] doesn't do it. I'm sure AT&T and MCI don't do [15] this. But an IXC could cheat on its PIU factors [16] and say, Well, I've got more interstate minutes, [17] if I can get a better price on interstate." The [18] important distinction there, as you said in your [19] question, it's the same service, a minute's a [20] minute's a minute — and it's really just a pricing [21] difference.

[22] Where Sprint has a fundamental [23] difference with Bell Atlantic and why we say it's [24] not arbitrage, is that there are fundamental

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[1] differences between buying unbundled network [2] elements, even using the platform proposal, and [3] buying a wholesale service.

[4] Now, I would agree that the network [5] is the same. As has been laid out in the record so [6] far, the network needs to stay intact. The network [7] is the same, but when you buy UNEs and when you buy [8] a wholesale service, you're talking two different [9] things. I think it's totally consistent with the [10] Act that laid out two different ways of approaching [11] market entry that a CLEC will make a decision [12] whether to purchase UNEs, even using a platform, [13] and purchasing a resold service based on a lot of [14] different factors.

(15] For example, there are additional (16] risks in buying UNEs that you don't see when you [17] buy resold services. For example, in the retail [18] market the prevailing market structure or rate [19] structure for local service could be flatrated; [20] but if a CLEC buys unbundled local switching from [21] the incumbent local-exchange carrier, they're going [22] to pay for it on a minute-by-minute basis. Well, [23] there's a risk that if their customer is a big [24] Internet user they could end up having a whole lot

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[1] of Internet minutes in the month, which are local [2] minutes, which means the CLEC could find that it's [3] paying more in UNE charges for local switching than [4] what it's getting in revenues. The point I'm [5] making is, because when you buy UNEs you're buying [6] based on how the costs are incurred and not based [7] on a discount, there's some additional risks.

(8) Now, there are other things, like if [9] you're buying UNEs you have to invest in being able [10] to bill and collect access services. You have to [11] have relationships with IXCs that you don't have to [12] have if you're buying resold services.

You have to [13] deal with reciprocal compensation for terminating [14] traffic; that's an issue that 'ou don't have to [15] deal with when you're simply buying a wholesale [16] service.

[17] My point in the wholesale discussion [18] is, I don't think there is an arbitrage situation [19] because I think fundamentally it's two different [20] ways of approaching it, whether you buy UNEs using [21] the combination or whether you buy a wholesale [22] service.

[23] MR. LEVY: Commissioner Vasington has [24] some questions.

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[1] EXAMINATION

[2] BY COMMISSIONER VASINGTON:

[3] **Q**: Is there anything short of the UNE [4] platform, any level of combination that's feasible [5] for Sprint to offer service?

[6] A: Well, I think the sticking point here is [7] the loop-and-switch combination. I want to make [8] sure I'm answering your question. That's the piece [9] that Sprint needs, and that's the piece that Bell [10] Atlantic is not offering. I mean, I think that [11] Bell Atlantic's switch subplatform addresses some [12] of the issues with being able to combine switching [13] and transport together. I disagree with their glue [14] charge that they're proposing to do that, because [15] that's not going to be cost-based. But that seems [16] to begin to address some of the issues.

[17] The real heart of the issue, though, [18] for Sprint is wanting to have that loop and that [19] switching combined and wanting Bell Atlantic to do [20] it, willing to pay for it — you know, whatever [21] costs are created, legitimate costs are created, [22] we'll pay for. But that's kind of the fundamental [13] issue, is being able to link loops and ports [24] together.

- [1] Q: Is Sprint using unbundled network [2] elements to provide local service anywhere right [3] now?
- [4] A: Not to my knowledge. We're providing [5] local service in California. I believe we're only [6] doing that through resold services through [7] wholesale discounts.
- [8] Q: Thank you.
- [9] EXAMINATION
- [10] BY MR. LEVY:
- [11] Q: How about the extended-loop service that [12] Bell Atlantic is proposing? Is that helpful?
- [13] A: I guess it is and it isn't. It's [14] somewhat helpful to be able to hook a loop to [15] transport together. The problem I have, again, is [16] the glue

charge that they're combining, which is [17] not going to be cost-based, which I think is [18] discriminatory. It begins to address the issue if [19] your entry strategy is to have a switch in the [20] state and you want to be able to transport loops [21] back to it.

[22] Now, I'm not sure I altogether [23] understand their proposal. When I read it, it [24] sounded like they were limiting it to voice-grade,

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- [1] and my note said 2R analog and ISDN-capable loops. [2] I'm not sure how you would hand a DS1 or DS3 and if [3] you'd have to buy that in a different way. That [4] point is a little unclear to me.
- [5] Q: It's a little off the topic; but in your [6] view, is the discount that Massachusetts has set [7] for resale service, is that sufficiently large to [8] permit CLECs to enter that market profitably?
- [9] A: Well, I'll tell you that what we have [10] found in California, where we are offering service, [11] that the problems are much greater and the [12] opportunity for making a reasonable contribution is [13] much smaller. So we haven't found that it's been [14] particularly profitable out there.
- [15] I'm not aware Sprint is in the [16] process of doing some modeling in other states [17] where we have looked at providing service based on [18] just wholesaling services, buying a wholesale [19] service, and found that it is very much a struggle [20] to be profitable.
- [21] I think what CLECs are finding is [22] that they need to in order to have that [23] profitability, they need to be able to bill for [24] access; they need to be able to provide service

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- [1] using unbundled network elements. But it becomes [2] problematic, though, when you introduce glue [3] charges and things like that that only add to the [4] cost of buying the service or buying the unbundled [5] network elements.
- [6] Q: On the resale side of things, is the [7] prohibition against joint billing, joint [8] marketing is that part of the problem?
- [9] A: Well, no, that's not part of the [10] problem. That prohibition will exist until [11] February of next year or until the RBOC would get [12] into the long-distance business: No, that's not [13] the problem per se. The problem, what we have seen [14] is that even a discount of 20 percent does not [15] adequately make up for the market-entry costs and [16] the other costs, the customer churn and things like [17] that, that CLECs are experiencing.

[18] MR. LEVY: Any questions?

- [19] MR. BEAUSEJOUR: Yes, I do, Mr. Levy, [20] just a couple.
- [21] CROSS-EXAMINATION
- [22] BY MR. BEAUSEJOUR:
- [23] **Q:** Mr.Carlson, do you know what the resale [24] discount is in Massachusetts?

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- [1] A: Not specifically. I'm going to guess [2] it's in the 20's, based on what I've heard today. [3] But I don't know specifically what it is.
- [4] **Q**: Have you done any analysis about the [5] profitability of offering resold services in [6] Massachusetts based on the discount set by the [7] Department?
- [8] A: I have not personally done that. We have [9] a group within Sprint who does that kind of [10] analysis. I'm not sure if they've done it for [11] Massachusetts.
- [12] **Q:** Have you ever seen an analysis that [13] Sprint has done for Massachusetts?
- [14] **A:** No.
- [15] **Q:** Let us assume for the moment that the [16] Department does not order Bell Atlantic to combine [17] unbundled network elements for a CLEC. Does Sprint [18] have a proposal for how Sprint would obtain access [19] to the individual elements so that they can combine [20] them?
- [21] A: Well, our position is that Bell Atlantic [22] should be required to combine them. With that [23] said, once an order is adopted and we've gone [24] through all the legal ins and outs to challenge it,

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- [1] then we'll have to live with whatever is on the [2] table. But we're not offering anything short of a [3] UNE combination.
- [4] Q: So you're making no proposal to the [5] Department in the event that the Department does [6] not order Bell Atlantic to provide UNE [7] combinations.
- [8] A: No.
- [9] MR. BEAUSEJOUR: I have no further [10] questions, Mr. Levy.
- [11] MR. LEVY: Anyone else? Ms. [12] Thurston, any redirect?
- [13] MS. THURSTON: No.
- [14] MR. LEVY: Thank you very much for [15] coming. I appreciate your patience through all the [16] long day.
- [17] Our plan is to adjourn for today and [18] reconvene on May 15th with the witnesses from MCI [19] and AT&T at that time. So we'll stand adjourned.
- [20] I would, however, like to talk to the [21] parties briefly after the close of the record.

[22] (4:45 p.m.)

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CERTIFICATE

I, Alan H. Brock, Registered
Professional Reporter, do hereby certify that t' >
foregoing transcript is a true and accurate
transcription of my stenographic notes taken on May

Alan H. Brock Registered Professional Reporter

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